



Campephaga quiscalina. ♂ ♀

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Birds

THE
BIRDS OF AFRICA,

COMPRISING ALL THE SPECIES WHICH OCCUR

IN THE

ETHIOPIAN REGION.

BY

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"A MONOGRAPH OF THE SUN-BIRDS," ETC.

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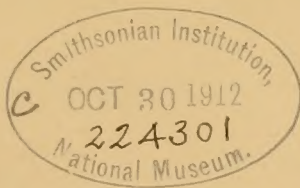
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PREFATORY NOTE.

THE present instalment completes the fifth volume of the late Captain Shelley's great undertaking.

Soon after the appearance of the first part of the present volume in 1906, the author was struck down by a sudden illness—a stroke of paralysis—and although he lived on till November 29, 1910, he was unable to continue his labours.

The completion of his work, however, was constantly in his thoughts, and shortly before his death I was asked by Mrs. Shelley if I would undertake this task. It was not, however, until afterwards, in the middle of last year, that the arrangements could be made for doing so. Mrs. Shelley then handed over to me all the MSS. and the proofs of four sheets which were already in type.

The plan and arrangement of the present part is mainly that of the late Captain Shelley, and my task has been to supply descriptions of some of the species, many of which were very incomplete, to revise the whole in the light of the additional facts and discoveries of the last six years, and to pass the work through the press. I am indebted to my father, Mr. P. L. Selater, for having read through the proofs for me, and to Mr. Ogilvie Grant for much help and many facilities afforded to me in the Bird Room at the British Museum.

It is hoped that the work may be completed in four or five more volumes.

W. L. SCLATER.

July 15, 1912.

CONTENTS.

	PAGE		PAGE
PREFATORY NOTE	iii.	Genus I. LOBOTOS	199
LIST OF PLATES	viii.	748. Lobotos lobatus	199
Section V. LANII	165	749. „ oriolinus	200
Family I. DICRURIDÆ	166	Genus II. CAMPEPHAGA	201
Genus I. DICRURUS	166	750. Campephaga quiscalina (Pl. li.)	202
724. Dicrurus forficatus	167	751. „ petiti	204
725. „ waldeni	171	752. „ nigra	205
726. „ fuscipennis	171	753. „ hartlaubi	209
727. „ aldabranus	172	754. „ phœnicea	210
728. „ afer	172	755. „ ignea	212
729. „ modestus	176	756. „ xanthornoides	
730. „ coracinus	177	(Pl. lii, fig. 1)	213
731. „ ludwigi	178	757. „ rothschildi	213
732. „ atripennis	181	Genus III. CORACINA	214
Family II. VANGIDÆ	182	758. Coracina cinerea	215
Genus I. XENOPIROSTRIS	184	759. „ sulphurea	217
733. Xenopirostris polleni	184	760. „ cucullata	217
734. „ xenopirostris	185	761. „ pectoralis	218
735. „ dami	186	762. „ graueri	221
Genus II. ARTAMIA	186	763. „ cæsia	221
736. Artamia viridis	187	764. „ pura	222
737. „ annæ	188	765. „ preussi	224
738. „ chabert	189	766. „ azurea (Pl. lii, fig. 2)	225
739. „ schistocerca	190	Genus IV. OXYNOTUS	226
740. „ bicolor	190	767. Oxynotus rufiventer	227
741. „ comorensis	191	768. „ newtoni	229
Genus III. ORIOLIA	192	Family IV. LANIIDÆ	230
742. Oriolia bernieri	192	Subfamily I. LANIINÆ	231
Genus IV. VANGA	192	Genus I. UROLESTES	232
743. Vanga curvirostris	193	769. Urolestes melanoleucus	232
744. „ griseipectus ... (Pl. l.)	194	Genus II. CORVINELLA	236
Genus V. LANTZIA	195	770. Corvinella corvina	237
745. Lantzia rufa	195	771. „ souzæ	239
Genus VI. CALICALICUS	196	Genus III. FISCUS	240
746. Calicalicus madagascariensis	196	772. Fiscus mackinnoni	242
Genus VII. AËROCHARIS	197	773. „ nubicus	244
747. Aërocharis prevosti	197	774. „ newtoni (Pl. liii, fig. 2)	247
Family III. CAMPOPHAGIDÆ	198	775. „ collaris	247

	PAGE		PAGE
776. <i>Fiscus humeralis</i> ...	249	816. <i>Laniarius sublacteus</i> ...	317
777. „ <i>smithi</i> ...	252	817. „ <i>atroflavus</i> ...	319
778. „ <i>cameruniensis</i> ...	252	818. „ <i>barbarus</i> ...	319
779. „ <i>subcoronatus</i> ...	254	819. „ <i>mufumbiri</i> ...	321
780. „ <i>marwitzi</i> (Pl. liii., fig. 1) ...	257	820. „ <i>atrococcineus</i> ...	322
781. „ <i>somalicus</i> ...	258	821. „ <i>erythrogaster</i> ...	325
782. „ <i>dorsalis</i> ...	261	822. „ <i>chrysostictus</i> ...	325
783. „ <i>cabanisi</i> ...	262	823. „ <i>funebri</i> ...	327
784. „ <i>excubitorius</i> ...	264	824. „ <i>alboplagatus</i> ...	330
785. „ <i>princeps</i> ...	265	825. „ <i>erlangeri</i> ...	330
786. „ <i>böhmi</i> ...	265	826. „ <i>nigerrimus</i> ...	331
Genus IV. <i>LANIUS</i> ...	267	827. „ <i>leucorhynchus</i> ...	331
787. <i>Lanius aucheri</i> ...	268	828. „ <i>holomelas</i> ...	334
788. „ <i>pallidirostris</i> ...	270	829. „ <i>poensis</i> ...	335
789. „ <i>elegans</i> ...	271	830. „ <i>fülleborni</i> ...	336
790. „ <i>leucopygos</i> ...	272	Genus II. <i>DRYOSCOPUS</i> ...	337
791. „ <i>uncinatus</i> ...	274	831. <i>Dryoscopus senegalensis</i> ...	338
792. „ <i>libberti</i> ...	276	832. „ <i>affinis</i> ...	342
793. „ <i>minor</i> ...	276	833. „ <i>gambensis</i> ...	344
794. „ <i>bogdanowi</i> ...	279	834. „ <i>congicus</i> ...	344
Genus V. <i>ENNEOCTONUS</i> ...	280	835. „ <i>malzacii</i> ...	346
795. <i>Enneoctonus collurio</i> ...	280	836. „ <i>nyansæ</i> ...	346
796. „ <i>gubernator</i> ...	285	837. „ <i>cubla</i> ...	349
797. „ <i>strümpelli</i> ...	285	838. „ <i>hamatus</i> ...	349
Genus VI. <i>PHONEUS</i> ...	287	839. „ <i>pringlii</i> ...	353
798. <i>Phoneus niloticus</i> ...	287	840. „ <i>thamnophilus</i> ...	354
799. „ <i>senator</i> ...	289	841. „ <i>angolensis</i> ...	355
800. „ <i>badius</i> ...	291	842. „ <i>nandensis</i> ...	356
Genus VII. <i>OTOMELA</i> ...	292	843. „ <i>bocagei</i> ...	357
801. <i>Otomela isabellina</i> ...	293	844. „ <i>jacksoni</i> ...	357
802. „ <i>phœnicuroides</i> ...	295	845. „ <i>ansorgei</i> ...	357
Subfamily II. <i>LANIARINÆ</i> ...	296	Genus III. <i>CHAUNONOTUS</i> ...	359
Genus I. <i>LANIARIUS</i> ...	297	846. <i>Chaunonotus sabini</i> ...	359
803. <i>Laniarius ruficeps</i> ...	299	847. „ <i>melanoleucus</i> ...	359
804. „ <i>rufinuchalis</i> ...	300	Genus IV. <i>TSCHAGRA</i> ...	361
805. „ <i>kismayensis</i> ...	300	848. <i>Tschagra senegala</i> ...	362
806. „ <i>luehderi</i> ...	301	849. „ <i>remigialis</i> ...	369
807. „ <i>ferrugineus</i> ...	303	850. „ <i>habessinica</i> ...	371
808. „ <i>major</i> ...	306	851. „ <i>erlangeri</i> ...	371
809. „ <i>mossambicus</i> ...	308	852. „ <i>percivali</i> ...	373
810. „ <i>guttatus</i> ...	310	853. „ <i>australis</i> ...	374
811. „ <i>æthiopicus</i> ...	312	854. „ <i>ussheri</i> ...	374
812. „ <i>ambiguus</i> ...	312	855. „ <i>minor</i> ...	374
813. „ <i>somaliensis</i> ...	312	856. „ <i>emini</i> ...	374
814. „ <i>bicolor</i> ...	316	857. „ <i>congener</i> ...	374
815. „ <i>turatii</i> ...	316	858. „ <i>frater</i> ...	375

CONTENTS

vii.

	PAGE		PAGE
859. <i>Tschagra tschagra</i> ...	379	897. <i>Chlorophoneus rudolfi</i> ...	434
860. „ <i>natalensis</i> ...	380	898. „ <i>olivaceus</i> ...	435
861. „ <i>sousæ</i> ...	382	Genus XI. <i>Nicator</i> ...	436
862. „ <i>ansorgei</i> ...	382	899. <i>Nicator chloris</i> (Pl. lv., fig. 1)	436
863. „ <i>jamesi</i> ...	383	900. „ <i>gularis</i> (Pl. lv., fig. 2)	439
864. „ <i>mandana</i> ...	383	901. „ <i>vireo</i> ...	441
865. „ <i>kismayensis</i> ...	383	Genus XII. <i>Lanioturdus</i> ...	442
Genus V. <i>ANTICHRONUS</i> ...	386	902. <i>Lanioturdus torquatus</i> ...	442
866. <i>Antichromus minutus</i> ...	387	Family V. <i>PRIONOPIDÆ</i> ...	444
867. „ <i>anchietæ</i> ...	389	Genus I. <i>EUROCEPHALUS</i> ...	444
Genus VI. <i>RHODOPHONEUS</i> ...	391	903. <i>Eurocephalus anguitimens</i> (Pl. lvi., fig. 2)	445
868. <i>Rhodophoneus cruentus</i> ...	392	904. „ <i>rueppelli</i> ...	447
869. „ <i>hilgerti</i> (Pl. liv., fig. 1)	394	Genus II. <i>Nilaus</i> ...	450
870. „ <i>cathemagmenus</i> (Pl. liv., figs. 2, 3)	395	905. <i>Nilaus brubru</i> ...	451
Genus VII. <i>TELOPHORUS</i> ...	396	906. „ <i>minor</i> ...	453
871. <i>Telophorus viridis</i> ...	397	907. „ <i>afer</i> ...	456
872. „ <i>quadricolor</i> ...	398	908. „ <i>erythræ</i> ...	456
873. „ <i>dohertyi</i> ...	400	909. „ <i>hilgerti</i>	456
874. „ <i>zeylonus</i> ...	402	910. „ <i>camerunensis</i> ...	460
Genus VIII. <i>NEOLESTES</i> ...	405	911. „ <i>nigritemporalis</i> ...	461
875. <i>Neolestes torquatus</i> ...	405	912. „ <i>affinis</i> (Pl. lvi., fig. 1)	462
Genus IX. <i>MALACONOTUS</i> ...	406	Genus III. <i>SIGMODUS</i> ...	463
876. <i>Malaconotus poliocephalus</i> ...	407	913. <i>Sigmodus caniceps</i> ...	464
877. „ <i>catharoxanthus</i> ...	407	914. „ <i>harterti</i> ...	464
878. „ <i>hypopyrrhus</i> ...	409	915. „ <i>rufiventris</i> ...	466
879. „ <i>approximans</i> ...	412	916. „ <i>mentalis</i> (Pl. lvii., fig. 2)	467
880. „ <i>monteiri</i> ...	413	917. „ <i>scopifrons</i> ...	468
881. „ <i>lagdeni</i> ...	414	918. „ <i>retzii</i> ...	470
882. „ <i>cruentus</i> ...	415	919. „ <i>nigricans</i> ...	470
883. „ <i>gabonensis</i> ...	416	920. „ <i>intermedius</i> ...	470
884. „ <i>adolfi-friederici</i>	417	921. „ <i>tricolor</i> ...	470
885. „ <i>gladiator</i> ...	417	922. „ <i>graculinus</i> ...	470
Genus X. <i>CHLOROPHONEUS</i> ...	418	Genus IV. <i>PRIONOPS</i>	474
886. <i>Chlorophoneus multicolor</i> ...	419	923. <i>Prionops poliocephala</i> ...	475
887. „ <i>batesi</i>	421	924. „ <i>poliolopha</i> (Pl. lvii., fig. 1)	481
888. „ <i>preussi</i> ...	421	925. „ <i>plumata</i> ...	482
889. „ <i>melamprosopus</i> ...	422	926. „ <i>concinata</i> ...	483
890. „ <i>nigrifrons</i> ...	423	927. „ <i>martensi</i> ...	484
891. „ <i>manningi</i> ...	424	928. „ <i>cristata</i> ...	485
892. „ <i>nigrithorax</i> ...	426	929. „ <i>omoensis</i> ...	485
893. „ <i>sulfureopectus</i> ...	426	930. „ <i>melanoptera</i>	485
894. „ <i>similis</i> ...	427	931. „ <i>intermedia</i> ...	485
895. „ <i>rubiginosus</i> ...	431	932. „ <i>vinaceigularis</i> ...	487
896. „ <i>bertrandi</i> ...	433		

LIST OF PLATES, VOL. V., PART II.

Plate L.	<i>Vanga griseipectus.</i>
Plate LI.	<i>Campephaga quiscalina.</i>
Plate LII., fig. 1.	„ <i>xanthornoides.</i>
„ „ 2.	<i>Coracina azurea.</i>
Plate LIII., fig. 1.	<i>Fiscus marwitzi.</i>
„ „ 2.	„ <i>newtoni.</i>
Plate LIV., fig. 1.	<i>Rhodophoneus hilgerti.</i>
„ „ 2, 3.	„ <i>cathemagmenus.</i>
Plate LV., fig. 1.	<i>Nicator chloris.</i>
„ „ 2.	„ <i>gularis.</i>
Plate LVI., fig. 1.	<i>Nilaus affinis.</i>
„ „ 2.	<i>Eurocephalus anguitimens.</i>
Plate LVII., fig. 1.	<i>Prionops poliophpha.</i>
„ „ 2.	<i>Sigmodus mentalis.</i>

Section V. LANII.

Passerine Birds, which do not swallow their food during flight, nor with their backs downwards. Secondaries never reach to the tip of the wing. Bill never Finch-like. Nestlings generally with the plumage more barred than in the adults, and never brighter in colour nor with the subterminal spots to the feathers more rounded than in the adults.

Among the habits most constant in the members of this section, may be remarked the prominent positions they select, such as the exposed topmost bough of a bush, whence they watch to catch the passing insects, which constitute their chief food. When they have eaten enough they often impale upon thorns their superfluous captures for later use as required, which habit has suggested the name of "Butcher-birds" for them in England, and for the same reason, coupled with the black and white plumage of the common South African species, some have there received the name of Fiscal Shrikes.

The nest is a strong cup-shaped structure, generally placed in a bush a few feet from the ground, and the eggs, usually five in a clutch, are distinctly spotted.

KEY TO THE FAMILIES AND SUBFAMILIES.

a. Sides and back of tarsus bilaminated.

*a*¹. Bars of the feathers, when present in the young only, paler than the feathers themselves.

*a*². Tail of only 10 feathers; bill wide, and black like the general plumage; rictal-bristles strong . . . *Dicruridæ*.

*b*². Tail of 12 feathers; bill narrower than deep at the nostrils, and, like the plumage, rarely black . . . *Vangidæ*.

*b*¹. Bars on the feathers, when present, in the young only, darker than the feathers themselves.

*c*². Bill more flattened, not deeper than broad at nostrils; upper mandible less hooked and notched; shafts of some of the feathers of lower back with stiff, sharply pointed ends . . . *Campophagidæ*.

*d*². Bill deeper than broad at the nostrils; upper mandible strongly notched; shafts of feathers of back normal . . . *Laniidæ*.

*a*³. Feathers of lower back normal; nostrils at least partly concealed by the frontal bristles . . . *Laniinæ*.

*b*³. Feathers of lower back soft and fluffy; nostrils more free from frontal bristles . . . *Laniariinæ*.

- b.* Sides and back of tarsus covered with scales *Prionopidæ*.
*c*¹. Eyelids and feathers of head normal; bill deeper than
 broad at the nostrils, and blackish *Nilainæ*.
*d*¹. Eyelids wattled; either the head crested, or the bill
 and feet orange red *Prionopinæ*.

Family I. DICRURIDÆ.

Genus I. DICRURUS.

The Drongos have the bill black, wide at the gape, somewhat flattened, with a rather strong hook and a notch on the upper mandible near the end; rictal-bristles strong; nostrils covered with bristly plumes. Wing pointed; 1st primary not less than half the 2nd. Tail of only ten feathers, often strongly forked, with the exterior feathers curved outwards towards their ends, sometimes nearly square. Tarsi and feet black, the former rather short. Plumage glossy black, rarely greyish; iris red in adult.

The eggs are generally three in a clutch, of a rosy white ground colour, with brown spots. The nests and voice somewhat resemble those of the Orioles, but the Drongos have apparently a great power of imitating the songs of other birds.

Type.

- Dicrurus, Vieill. Analyse, pp. 41, 70 (1816); id. N.
 Dict. ix. p. 586 (1817) *D. balicassius*.
 Drongus, Rafin. Analyse, p. 67 (1815) *nom. nud.* ?
 Edolius, Cuv. Regn. An. i. p. 350 (1817) *D. forficatus*.
 Bhuchanga, Hodgs. Ind. Rev. i. p. 326 (1837) *D. macrocerus*.
 Musicus, Reichenb. Av. Syst. pl. 88, fig. 9 (1850) *D. afer*.
 Balicassius, Bp. C. R. xxxviii. p. 539 (1854) *D. balicassius*.

The family ranges from the western side of Africa to the Philippine Islands and Australia, and comprises about forty species, of which five are confined to the African continent and four to the Madagascar subregion.

KEY TO THE SPECIES.

- a.* Tail more forked; depth of fork 1·25 to 2·5 inches.
*a*¹. Frontal feathers elongated and longer than the culmen . . *forficatus*.
*b*¹. Frontal feathers not elongated.
*a*². Quills and tail black; wing 5·6; tail, centre feathers
 5·0, outer ones 7·5; tarsus 1·0 *waldeni*.

- b*². Quills and tail browner.
- a*³. Wing 5·8, tail 5·6, tarsus 0·96 *fuscipennis*.
- b*³. Wing 5·3; tail, centre feathers 4·2, outer ones 5·55; tarsus 0·92. Female differs in being slaty grey above and greyish white below. *aldabranus*.
- b*. Tail less forked; depth of fork less than 1 inch.
- c*¹. Tail more forked. Wing 4·8 to 5·5; tail 4·4 to 5·3.
- c*². Back strongly glossed like the crown and upper tail-coverts *afer*.
- d*². Back velvety black, contrasting strongly with the glossy green of the crown and upper tail-coverts.
- c*³. Larger; culmen 1·0, wing 5·2 to 5·5, tail 4·8 to 5·0 *modestus*.
- d*³. Smaller; culmen 0·8, wing 4·8 to 5·3, tail 4·4 to 4·5 *coracinus*.
- d*¹. Tail square or much less forked; wing 3·8 to 4·6; tail 3·5 to 4·2.
- e*². Ends of tail-feathers more angular; wing 3·8 to 4·2; tail 3·5 to 3·7 *ludwigi*.
- f*². Ends of tail-feathers more rounded; wing 4·0 to 4·6; tail 3·5 to 4·2 *atripennis*.

Dicrurus forficatus.

Lanius forficatus, Linn. S. N. i. p. 134 (1766) *Madagascar*.

Dicrurus forficatus, E. Newton, Ibis, 1863, p. 348, pl. 13, fig. 7 *egg*; Selater, Ibis, 1864, p. 299; E. Newton, P. Z. S. 1877, p. 297 *Johanna Isl.*; Hartl. Vög. Madag. p. 148 (1877); Milne Edw. & Grand. Hist. Madag. Ois. p. 399, pls. 152, 153 (1885); Cowan, Ibis, 1885, p. 101 *Madagascar*; Milne Edw. & Oust. N. Arch. Mus. Hist. Nat. Paris (2), x. p. 256 (1888) *Johanna Isl.*; Shelley, B. Afr. i. No. 644 (1896); id. Ibis, 1901, p. 590.

Edolius forficatus, Sharpe, Cat. B. M. iii. p. 254 (1877); Tweeddale, Ibis, 1878, p. 71; Shelley, P. Z. S. 1879, p. 677 *Johanna Isl.*; Sibree, Ibis, 1891, p. 437.

Muscicapa galatea, Bodd. Pl. Enl. p. 11 (1783).

Dicrurus cristatus, Vieill. N. Dict. ix. p. 587, pl. D 3, fig. 2 (1817).

Adults. Black with a bluish green gloss all over, as in *D. afer*, from which it differs in being larger and in the feathers of the forehead being much elongated, forming a crest which is considerably longer than the culmen; the tail is also longer and more forked. Iris red; bill and feet black. Total length 10·7 inches, culmen 0·8, wing 5·3, tail 5·5, tarsus 1·5. *Madagascar* (Crossley).

Immature. Differs in having some white marginal bands on the upper wing-coverts and under tail-coverts.

The Madagascar Crested Drongo inhabits the islands of Madagascar and Johanna.

Although apparently common throughout Madagascar and Johanna Island, it is not known from elsewhere, being replaced on the islands of Mayotte by *D. waldeni* and on Great Comoro by *D. fuscipennis*.

In Madagascar, according to Grandidier, the Crested Drongos live in small bands and are equally common in all localities. They specially affect dead boughs to perch on, but may also be seen on the roofs of houses and the railing which pens in the cattle, rising at intervals in the air to seize some passing insect. They are said to have the power of imitating the cry of other birds. Their nest is cup-shaped, but rather shallow, and is roughly constructed of dry twigs. They lay from three to four eggs, which are of a rosy white colour, with small rounded spots of brown or rufous, and measure 1.0×0.75 . Those from the west of Madagascar appear generally to be whiter and with smaller spots than those from more eastern localities.

He further informs us that this bird is known to the natives by different names, as the "Drongo" by the Betsimsarakas; the "Railovy" by the Sakalavas, Hovas and Antankaranas; the "Railomba" by the Baras, Antanalas and the Betsileos; and "Raidonga" by the Antaimoronas.

Dr. S. Roch met with this species from the coast up to the Alanamassiota forest, and writes: "I found a nest of this bird when passing the forest on October 27; it was suspended in the fork of a tall bush, as an Oriole's would be, and was composed of a stiff, hairy kind of grass, neatly interwoven, without any softer lining. It contained three salmon-coloured eggs, spotted, chiefly at the larger end, with dull red and ash-colour, some of the spots having a "penumbra" as in the eggs of the Chaffinch, the spots almost

forming a circle. They are altogether Shrike-like in appearance.

"I have seen this little bird attack with such fierceness a kite which hovered close to its nesting-place, as to make the latter beat a quick retreat. They have a curious habit of darting to the surface of a stream, striking it with their wings, and ascending to a bush on the opposite side; they keep this up in pairs, sometimes for twenty minutes, crossing and recrossing each other, probably catching flies or aquatic insects."

In Madagascar, writes Sir E. Newton, - "After the Thrush, this I consider to be the commonest bird. In its habits it is a true Shrike. I obtained several nests; the most favourite position is a bough overhanging a river. Three appear to be the normal number of eggs laid. A nest I have by me is composed of roots and the tendrils of some plant, and is woven neatly to the fork of a bough by spiders' webs. The eggs are of a pale salmon-colour, with light lilac blotches and reddish brown spots, the latter marking blurred."

The Rev. W. Deans Cowan, in his "Notes on the Natural History of Madagascar," writes: "In travelling through the forest of Madagascar nothing strikes one more than what appears to be the absence of bird-life. Now and again one hears the cry of the *Centropus toulou*, mostly on the outskirts of the forest. One passes the brilliant *Coua cærulea*, making its way quietly through the thicket; but that is the most that is generally seen or heard of the birds in the great forest. True, if we were to penetrate into the denser forest we might come upon the *Atelornis pittoides* or *A. crossleyi*, the *Euryceros prevosti*, the velvety *Philepitta jala*, or such birds as love the recesses and lonely shades of these silent woods. Suddenly, and often unexpectedly, the trees overhead become filled with crowds of birds, chattering

in many a different note—that is what may be called a ‘drive’ of birds. Hundreds, sometimes thousands, of them have congregated for feeding purposes, and are now passing through the forest, clearing the insects from trees and shrubs. Conspicuous among them for size and noise is the *Dicrurus forficatus*, *Tylas edwardi* and *Campephaga cana*,” &c.

On Johanna Island, according to Dr. Dickenson, the Crested Drongos were “common in the more open spaces of the forest above Pomone.”

Capt. Bewsher, who visited this island in 1896, wrote: “A very sharp, clever bird, the only bird whose habits I was able to study, having had five or six brought to me alive; but I only managed to keep them for a few days. They were very pugnacious, attacking crows and hawks, and even beating them off. They sing very sweetly and softly, and seem to be able to imitate other birds. They live on grasshoppers. On presenting a large grasshopper at the wire of the cage it is immediately seized by the beak; the bird then grasps it with its foot and settles on the perch. Then at once the bird makes a jump in the air, and alights with one of the springing legs of the creature free from its grasp; this it tears off, and then repeats the same movement, tearing off the other leg, then, still holding the wings grasped to the body, the bird pulls off the head and swallows it. Afterwards it tears off the wings one by one, making a jump round off the perch, and freeing one wing from its grasp in each jump as it did with the legs before described. The body is then well masticated and swallowed whole. They generally ate two large locusts at a time. They are not common. Native name, ‘Maremondou.’”

Sir John Kirk sent me eleven specimens from Johanna Island, so I think we may presume it to be as abundant on that island as in Madagascar.

Dicrurus waldeni.

Dicrurus waldeni, Schl. Ned. Tijdschr. Dierk. iii. p. 86 (1866) *Mayotte Isl.* ;
id. P. Z. S. 1866, p. 423; id. and Poll. Faun. Madag. Ois. p. 80, pl.
23 (1868); Hartl. Vög. Madag. p. 150 (1877); Shelley, B. Afr. i.
No. 645 (1896); id. Ibis, 1901, p. 590.

Buchanga waldeni, Sharpe, Cat. B. M. iii. p. 253 (1877).

Buchanga atra var. *waldeni*, Milne Edw. and Oust. N. Arch. Mus. Hist.
Nat. Paris (2), x. p. 257 (1888) *Mayotte Isl.*

Subspecies a. D. fuscipennis.

Buchanga atra var. Milne Edw. and Oust. C. R. Ac. Sc. ci. p. 221 (1885)
Great Comoro Isl.

Buchanga atra var. *fuscipennis*, Milne Edw. and Oust. Ann. Sc. Nat.
Zool. (7) ii. p. 225 (1887), *Great Comoro Isl.*

Dicrurus fuscipennis, Shelley, Ibis, 1901, p. 590.

Type of *D. waldeni*. Black, glossed all over with bluish green. Iris red;
bill and feet black. Total length 12·6 inches, culmen 1·2, wing 5·6, tail 7·6
(depth of fork 2·5), tarsus 1·0. Mayotte Island.

D. fuscipennis. Similar to the last, but with the quills and tail browner.
Wing 5·8, tail 5·6, tarsus 0·96. Great Comoro Island.

Walden's Drongo inhabits the island of Mayotte, and to this form probably belongs the Great Comoro Island bird.

I here treat these as subspecies owing to the lack of evidence to the contrary; but the characters for their separation appear to me to be of doubtful value, possibly due to the season and age of the type specimens when they were procured.

D. waldeni was discovered by Pollen on Mayotte, where he considered it to be scarce and shy, frequenting in parties of three or four the tops of the trees and feeding on beetles. The song, he observes, is melodious with an organ-like tone. Milne Edwards and Oustalet compare their *D. fuscipennis* with the common Indian Drongo, from which it differs in its larger size (wing 5·8), and resembles in this respect *D. waldeni*. I much doubt the browner shade of the quills and tail being a constant character for its distinction from the latter species.

Dicrurus aldabranus.

Buchanga aldabrana, Ridgway, Pr. U. S. Nat. Mus. xvi. p. 597 (1894)
Aldabra Isl.

Dicrurus aldabranus, Shelley, Ibis, 1901, p. 590.

Adult male. Similar in colouring to that of *D. waldeni*. Total length 11.25, wing 5.3, tail 5.55 (depth of fork 1.35), tarsus 0.92. Aldabra Island, 8. 10. 92.

Female. More nearly resembles *D. leucopygialis* from Ceylon, but is a paler and greyer bird. Upper parts dusky grey with paler margins to the feathers of the upper half of head, the rump and upper tail-coverts, which margins incline to white on the forehead and next to the tail; wings, with some imperfect white margins most strongly marked on the median and greater-coverts and the secondaries; under wing-coverts white; under-surface of quills uniform dusky grey of the same shade as the entire tail; underparts white, mottled with deep grey and inclining to uniform dusky grey on the flanks. "Iris reddish brown" (Ridgway); bill and feet black. Total length 9.3 inches, culmen 1.0, wing 4.65, tail 4.8 (depth of fork 1.1), tarsus 0.9. Aldabra Island, ♀, 14. 3. 06 (M. J. Nicoll).

The Aldabra Drongo is confined to the island of that name.

Regarding the types, Dr. Ridgway writes: "Differ from *Buchanga atra* in the larger and more strongly hooked bill, much longer nasal plumes (reaching half-way from nostrils to tip of bill), much narrower rectrices, and in the very pale colouring of the female." The only other specimen yet recorded is the female I have above described, which is now in the British Museum.

Dicrurus afer.

Corvus afer, Licht. Cat. Rer. nat. Hamb. p. 10 (1790) *S. Africa*.

Dicrurus afer, Shelley, B. Afr. i. No. 646 (1896); Reichen. Vög. Afr. ii. p. 646 (1903); Whitehead, Ibis, 1903, p. 230 *Orange R.*; Alexander, t.c. p. 359 *Fernando Po*; Shortridge, Ibis, 1904, p. 189 *Pondoland*; Clarke, t.c. p. 525 *Bloemfontein*; Kemp, Ibis 1905, p. 247 *Sierra Leone*; Butler, Ibis, 1905, p. 326 *Sudan*; Erlanger, J. f. O. 1905, p. 703 *N.E. Africa*; Butler, Ibis, 1908 p. 224, 1909, p. 80 *Bahrel Ghazal*; O.-Grant Trans. Zool. Soc. xix. p. 267 (1910) *Ruwenzori*.

Corvus adsimilis, Bechst. Kurze Uebers. 117 (1811).

Buchanga assimilis, Sharpe, Cat. B. M. iii. p. 247 (1877); Tweeddale, Ibis, 1878, p. 74; O.-Grant, Ibis, 1904, p. 255 *Bogra*; 1904, p. 201 *Uganda*; Bannerman, Ibis, 1910, p. 294 *N. Somaliland*.

Dicrurus mystaceus, Vieill. N. D. ix. p. 588 (1817) *ex Levaill.*; Tweeddale, Ibis, 1878, p. 84.

Dicrurus musicus, Vieill. N. D. ix. p. 586 (1817) *Cape of Good Hope*.

Muscicapa divaricata, Licht. Verz. Doubl. p. 52 (1823) *Senegambia*.

Muscicapa emarginata, Licht. *l.c.* *S. Africa*.

Edolius lugubris, Hempr. and Ehr. Symb. Phys. fol. S, pl. 8, fig. 3 (1828) *Dongola*.

Dicrurus afer lugubris, Neum. J. f. O. 1905, p. 232 *N.E. Africa*.

Dicrurus canipennis, Swains. B. W. Afr. i. p. 254 (1837).

Diérurus aculeatus, Cass. Pr. Philad. Acad. 1851, p. 348 *Abyssinia*.

Dicrurus erythrophthalmos, Heugl. J. f. O. 1862, p. 302 *Abyssinia*.

Dicrurus fugax, Peters, J. f. O. 1868, p. 132 *Inhambane*.

Dicrurus modestus atactus, Oberholser, Pr. U. S. Nat. Mus. xxv. p. 35 (1900) *Gold Coast*.

Dicrurus coracinus (non Verr.), Alexander, Ibis, 1902, p. 307; 1903, p. 359 *Gold Coast*.

Adults. Black, with a nearly uniform gloss all over of green, blue or violet blue, varying in tint somewhat according to the season and climate; under surface of wings dusky ash-colour, with the coverts black. Iris red; bill and feet black. Total length 9·4 inches, culmen 0·85, wing 5·4, tail 4·0 (depth of fork 0·9), tarsus 0·7. Durban ♂ (T. L. Ayres).

Immature. Differs from the adults in having white terminal edges to some of the feathers of the breast, under tail-coverts and outer wing-coverts. Pinetown ♂, 20. 3. 74 (Shelley).

Nestling. Browner than the adults, with broad brownish white edges to the feathers of the forehead, front of crown, scapulars, wing-coverts, lower back, upper and under tail-coverts, and the breast. Milanji (A. Whyte).

The African Glossy-backed Drongo ranges over Africa generally, southward from about 16° N. lat.

The species is not only one of the most abundant of African birds, but is also one of the most evenly and widely distributed species; the mere list of the localities, from whence it has been recorded by ornithologists, filling more than a page of Dr. Reichenow's "Vögel Afrikas." I do not find any specially interesting notes regarding the species from West Africa. It is known to the natives of Liberia as the "Lala-we," according to Mr. Currie, and on the labels of Anchieta's specimens are recorded the following native names: "Kinganja" (Benguella), "Ganga" (Caconda),

"Xinganja" (Quindumbo), and at the Rio Coroca, Capello and Ivens found it known as the "Mentengo."

From Damaraland Chapman wrote: "Common almost everywhere. Usually observed singly or in pairs. Partially migratory. Very fierce. Will fearlessly attack any bird, no matter what size—the most powerful Falcon not excepted—and will not rest until it has expelled the intruder from its particular beat. At times, and more especially during the season of incubation, he reminds one of some of the Song Thrushes of Europe, for, like them, he may be heard late at night, perched on the top of trees, uttering the most melodious notes, rather plaintive perhaps, but, at the same time, very soothing and varied. In the early morning, an hour or so before daybreak, he may also be heard carolling to his mate."

Stark and Selater observe (B. S. Afr. ii. p. 266): "This Drongo is particularly fond of bees, feeding on scarcely anything else when these are plentiful; so that a few of them will soon clear a hive. In districts in which the grass is periodically burnt, Drongos flock from all quarters at the first signs of a fire, and display the greatest intrepidity in dashing through the smoke and flames in pursuit of the insects that are driven out. They are equally bold in defence of their nest, flying round the head of an intruder with angry cries, and even attacking him with beak and wings. As a rule rather a silent bird, towards the pairing season the male becomes a charming songster, uttering the most melodious notes and frequently singing at night, both after sunset and before sunrise; but the song of this species varies considerably with locality, that of the bird in Western Cape Colony differing entirely, according to Andersson, from that of the same species in Damaraland. The nest of the Drongo is a slight but firmly constructed shallow saucer, saddled on a branch near its extremity, frequently at a con-

siderable height. It is built of rootlets and small flexible twigs, lined with finer rootlets and tendrils, occasionally with horsehair. The eggs, usually four in number, vary considerably in colour and shape. The ground colour varies from white to deep salmon pink, and this is generally somewhat sparingly spotted, sometimes in a zone, with different shades of purple, lilac, or salmon. In measurement they average 1.00×0.70 ." Erlanger, J. f. O. 1905, p. 703, has described several varieties of the eggs.

When I was in Natal I saw these Drongos, generally in pairs, perched on the topmost boughs of the scattered bushes, in the open country, and frequently one would rise in a graceful amble in the air after some passing insect, returning to the same perch to enjoy leisurely its capture. In Gazaland, where there are two native Zulu races, Mr. Swynnerton informs us that it is called by the Ishindowo "Indhenguti," and by the Singuni "Intengu"; and further writes: "'The Rock-vogel' (Smoke-bird) of the local Dutch is so called on account of its being always to the fore, in flocks of 5, 8, or even 11 individuals, when a grass-fire is in progress, dashing backwards and forwards through the smoke after the fleeing insects; the crops of two, shot in June while thus engaged, contained a wasp, a cicada and numerous beetles and flies. The habit of this bird, already referred to, of assuming the leadership of the flocks of small birds so often met with in the open bush has led to its being called by the natives the 'Induna yezinyone' (General of the birds). It will attack owls, hawks and snakes which approach its charge, and even when one of them has seized a small bird it will frequently succeed in making it drop its prey, swooping down on the back of the marauder's neck and generally harassing and blinding it. According to the natives a Drongo is never bitten by a snake, owing to its confining its attack to the back of the head and carefully

avoiding the fangs. It is said also to bait, but at a more respectful distance, lions, leopards, and other wild animals, betraying their presence to the natives by its excited cries and actions. This species is never found in the forest." Böhm mentions it as the commonest and most generally distributed bird throughout his travels from Zanzibar Island to Lake Tanganyika, welcoming the rising sun with its melodious song and boldly defending its rights against hawks. Fischer records as its Zanzibar name "Mlamba," and towards Lamu as the "Kosimamba."

Erlanger found it extremely common throughout his expedition from Zeila into South Somaliland, and collected many eggs which varied in colouring from those of the true Shrikes to those of the Oriole. Heuglin records it as equally abundant from the Red Sea to Kordofan and ranging northward to 20° N. lat.

Dicrurus modestus.

Dicrurus modestus, Hartl. Rev. et Mag. Zool. 1849, p. 495 *Prince's Isl.*; id. Abhandl. Naturw. Hamburg ii. pt. 2, p. 50 pl. iv. (1852); Sharpe, Cat. B. M. iii. p. 232 (1877 pt.) *Princes Isl.*; Tweeddale, Ibis, 1878, p. 72; Shelley, B. Afr. i. No. 647 (1896); Reichen. Vög. Afr. ii. p. 651 (1903).

Adults. Velvety black, with the forehead, crown, upper tail-coverts, wings and tail glossed with metallic bottle green. "Iris red; bill and feet black." Total length 10·4 and 9·3 inches, culmen 1·05, wing 5·5 and 5·2, tail 5·0 (depth of fork 0·8), tarsus 0·8. *Prince's Island*, ♂, ♀ (*Keulemans*).

The Larger Velvet-mantled Drongo is confined to *Prince's Island* in the Gulf of Guinea.

This species belongs to the *D. afer* group, in which the tail is strongly forked, and much resembles that Drongo, its chief distinguishing character being the deep velvet-like black of the back, which part in *D. afer* has a metallic gloss like the head.

From Prince's Island Dr. Dohrn writes: "They build their nests in September, when the rainy season sets in. Its shape is like that of *Oriolus galbula*. The native name is 'Maria Palu, feiticeira' (*i.e.*, Maria Palu, the sorceress). The bird is black, with red eyes; seems very indolent in daytime and shows a great ability in the imitation of some other birds' voices. Of course there must be some 'feiticeira' in it; therefore, sitting on the roof of a house and singing in a melancholy manner, it prophesies the death of one of the inhabitants; and this, of course, takes place, but often a long time after this prophecy."

Mr. Keulemans, who was on the island with Dr. Dohrn, has kindly sent me the following notes: "Very common; a quiet, somewhat lazy bird, in its habits resembling a Fly-catcher. It will sit for hours before making a move, and when a big insect is captured on the wing it invariably returns to the spot it has just left. It is one of the few birds that will eat butterflies. The nest resembles that of a Shrike and is constructed of small twigs, roots and grass, lined with fibres and feathers. It will often perch on chimney-pots or on the little crucifixes which the natives erect on the top of the roofs of their huts or houses."

Dicrurus coracinus.

Dicrurus coracinus, J. and E. Verr. Rev. et Mag. Zool. 1851, p. 311
Gaboon; Reichen. Vög. Afr. ii. p. 650 (1903); O. Grant, Ibis, 1908,
p. 268 *Upper Congo*.

Dicrurus modestus (non Hartl.), Sharpe, Cat. B.M. iii. p. 232 (1877 pt.).

Adults. Like those of *D. modestus*, but differ in being smaller. "Iris dark red; bill pink, feet dark grey." Total length 5.0 to 5.4 inches.

The Lesser Velvet-mantled Drongo ranges from Camaroon into Loango, and eastward to the Ituri River.

This is the continental representative of *D. modestus*, from

which it differs only in its smaller size. It is apparently fairly abundant, and evenly distributed over its somewhat limited range, and from Mr. Sjöstedt's observations (Sv. Vet. Ak. Handl. 1895, p. 79), I gather, that it resembles the better known *D. afer* as much in its habits as in its plumage. The type came from Gaboon, and its most southern range known is the Loango Coast, while inland it has been obtained by Emin at Irumu, on the Ituri River, in nearly 30° E. long., and by Carruthers at Ponhierville on the Upper Congo.

Dicrurus ludwigi.

Edolius ludwigii, Smith, S. Afr. Quart. Journ. 1834, p. 144 *Port Natal*.
Dicrurus ludwigii, id. Ill. Zool. S. Afr. Aves, pl. 34 (1839); Sharpe, Cat. B. M. iii. p. 233 (1877); Shelley, B. Afr. i. No. 648 (1896); Reichen. Vög. Afr. ii. p. 652 (1903); Shortridge, Ibis, 1904, p. 190 *Pondoland*; Erlanger, J. f. O. 1905, p. 704 *S. Somali*; Davies, J. S. Afr. Ornith. Union, 1907, p. 189, pl. ix. *nest*.

Adults in breeding plumage. Black, nearly uniformly glossed with deep bluish green, excepting on the throat. Iris red; bill and feet black. Total length 7·5 inches, culmen 0·7, wing 4·1, tail 3·7, tarsus 0·65. Durban, ♂, 20. 11. 74 (T. L. Ayres).

Adults in autumn plumage. More shaded with grey on the flanks and abdomen. Durban, ♂, 13. 4. 74 (Shelley).

Immature. Body much greyer, especially on the underparts. Iris pale brown. Durban, ♀, 6. 3. 74 (Shelley).

Ludwig's Drongo occurs in Western Africa from the Congo to the Cunene River and ranges from eastern Cape Colony northward into Somaliland.

The species is rare in Western Africa, but has been obtained at Mayanga (Bohndorff), Pungo Andonga (Mechoh) and Quissange (Anchieta), and has not been recorded from anywhere between the last-named place and Cape Colony.

Its most southern range known is Pondoland in eastern Cape Colony, where Mr. G. C. Shortridge records it as a

"resident, but not so plentiful as *D. afer*." Mr. W. L. Sclater adds to this remark: "New to the avifauna of Cape Colony."

The species was discovered by the late Sir Andrew Smith near Durban, and he writes: "They were very shy, and the least ground of alarm caused them either to fly from their usual haunts or to retire into the dense foliage whither we could not follow them. The most retired situations appeared to form their favourite habitats, and in those they were either seen perched upon some dead tree, or else performing rapid evolutions in the air in search of food."

Whenever I met with *D. ludwigi* in Natal it was creeping about in the dense bush some few feet from the ground, frequently coming within four or five yards to peer at me, and on the least movement I made, with a loud, harsh cry it flew to the denser covert. They were certainly not uncommon near Durban, for I rarely rested in the bush without their finding me out; but I did not come across them in the less wooded country around Pinetown. Mr. T. Ayres also remarked that this species keeps more to the dense bush than *D. afer*, and was never seen near the grass-fires, which the latter much frequent. In Natal, according to Mr. A. D. Millar (Stark and Sclater, Faun. S. Afr. B. ii. p. 268): "they commence nesting in October, both taking part in the construction of the nest; this is placed from six to eight feet from the ground in a fork near the extremity of the branch within the woods. The birds are generally found in the vicinity of the nest, which is cup-shaped, and is composed principally of lichens and cobwebs stretched across the fork, lined with dry stalks of leaves and lichens. During the process of incubation the hen bird sits very closely. I have on several occasions actually shaken the branch upon which the nest is fixed within three feet of me before the bird would leave, and she will then dart about you, becoming very

restless, and uttering a loud, harsh warning, which immediately attracts her mate. The eggs vary slightly, some clutches being more profusely spotted, but the colouring is very similar."

In Zululand, the Brothers Woodward procured a series of adult birds at Eschowe, and according to Mr. W. L. Selater its Zulu name is "Inlongwana." Northward, throughout eastern Africa, to as far north as southern Somaliland, it is somewhat locally distributed, as it never leaves the thick bush. Exton mentions meeting with a party of four at Kanya in Bechuanaland, Jameson and Ayres saw them in Mashonaland, and Mr. Guy Marshall observed a single pair at Salisbury. In the neighbouring Gazaland district, according to Mr. Swynnerton, it is called in the Ishindowo language, "Mdhenguri," and in Singuni, "Intengu," and he writes: "It is the common Drongo of the forest patches, to which it confines itself. It possesses, to the full, the bold habits and the loud and varied cries of its near relative *D. afer*, and quite takes its place in Chirinda." He also mentions that on two occasions, when he was examining nests of a Bulbul and of a Dove of the genus *Aplopelia*, he was assailed by pairs of these Drongos, which flew at him within a yard of his face.

From British Central Africa I have seen only a single specimen, obtained by General Manning at Chilasulo. It has been recorded from Biki (Böhm), Msua (Emin), and to this species belongs the *D. modestus*, Ibis, 1889, p. 226, from Kikombo in Ugogo, of which Dr. Pruen writes: "Native name 'Mulamba.' Feeds on butterflies and builds in trees," and the *D. atripennis*, P. Z. S. 1881, p. 578, recording Sir John Kirk's specimen from Usambara. Fischer obtained it at Muniuni, on the Tana River, and Erlanger procured thirteen specimens between Bardera and the mouth of the Juba River in south Somaliland.

Dicrurus atripennis.

Dicrurus atripennis, Swains. B. W. Afr. i. p. 256 (1837) *Sierra Leone* ; Sharpe, Cat. B. M. iii. p. 232 (1877) ; Tweeddale, Ibis, 1878, p. 72 ; Reichen. Vög. Afr. ii. p. 651 (1903) ; Sharpe, Ibis, 1904, p. 91 *Cameroon* ; O. Grant, Trans. Zool. Soc. xix. p. 267 (1910) *Ituri forest*.

Dicrurus sharpei, Oust. N. Arch. Mus. Paris, 1879, p. 97 *Gaboon* ; Reichen. Vög. Afr. ii. p. 652 (1903).

Adult. Similar to *D. ludwigi*, but differs in having the ends of the tail-feathers broader, more rounded, and with less angular tips. Iris red ; bill and feet black. Total length 8 inches, culmen 0.75, wing 4.5, tail 4.0, tarsus 0.65. Fantee ("Higgins" Brit. Mus.).

Immature. Duller, with a bluish bronze gloss almost entirely confined to the upper parts. Total length 7.3 and 8.0 inches, wing 4.1 and 4.0, tail 3.5. Gambia (Brit. Mus.) and Shonga, ♀, (Forbes).

The Western Bush-Drongo ranges from Senegambia into Gaboon and eastward to Songa near the source of the Ituri branch of the Congo.

The three typical specimens of *D. atripennis* were received by Swainson from Sierra Leone. Mr. Budgett records the species as abundant on the Gambia and it has been obtained on Bulama Island by Barahona, but Dr. Büttikofer did not consider it to be plentiful in Liberia. Drs. Reichenow and Lühder found these Drongos at Abouri, in the wooded highlands of Aquapim, in families of three young with their parents, and frequently heard their loud notes, but never met with them on the more open Accra plains. Mr. Boyd Alexander remarks that, in the specimens he obtained at Fumsu and Krachi, the crown, back and upper tail-coverts were glossy greenish black.

From Togoland Dr. Büttner procured specimens at Bismarckburg, among which Dr. Reichenow recognized both the typical form and *D. sharpei*, Oust. In Nigeria specimens have been obtained at Shonga (Forbes) and at Lokoja (Hartert) ; in Cameroon, at Victoria (Preuss), Bongo

(Sjöstedt), and Rio del Rey (Johnston). Mr. G. L. Bates, in his notes from Efulen, writes: "The 'Ebonde' (*Dicrurus atripennis*), with outward curled tail-feathers, lives in the dense forest. It utters an agreeable call or short song." Du Chaillu procured specimens in Gaboon, one of which is in the British Museum, and the type of *D. sharpei* was obtained by Marche at Douné in the Ogowé province, November, 1876. Recently two examples of this species have been obtained by the Ruwenzori expedition in the Ituri forest to the west of Lake Albert.

I have little to add to a remark I made, Ibis, 1901, p. 588, regarding *D. atripennis*, *D. sharpei*, and *D. ludwigi*; they are difficult to distinguish as species. I do not believe in the type of *D. sharpei* being anything but a bird in immature plumage of the present species. It has been described as most nearly allied to *D. ludwigi*, but differing in the slighter bill, its longer wing and in its colouring, it being of a blue shade, with scarcely any metallic gloss; bill and feet black. Length 7·2 inches, culmen 0·72, wing 4·2, tail 4·0, tarsus 0·56. This specimen appears to me to agree well with two others in the British Museum, one from the Gambia and the other an immature female obtained by Forbes at Shonga on the Niger. Dr. Reichenow, who keeps it as a distant species, gives its range as from Togoland to Gaboon and refers to it Emin's specimen from Songa, and *D. atripennis* as ranging from the Gambia to Gaboon.

Family II. VANGIDÆ.

Bill very variable in form and colour, rarely black; nostrils generally exposed. Wing very constant in form, moderately pointed; second primary just reaching to the end of the secondaries, and both falling short of the tip of the wing by the length of the tarsus. Tail square or rounded, shorter than the wing. Tarsus scaled in front only. All the feathers rounded and of moderate length; no portion of head bare.

Plumage of young either similar to that of the adult or with some pale bars.

With the exception of the form of the bill, and the rictal-bristles, all the members of this family present a striking affinity to each other, especially in the form of the wing. Their place is between the *Corvidæ* and the *Laniidæ*. Some of the species have no rictal-bristles and the young plumage similar but duller than in the adults; others have the rictal-bristles well developed and many have the plumage of the young barred. The bars on the plumage, when present in the young only, are white as in the *Dicruridæ*. *Vanga curvirostris* shows a marked affinity to the Crow-Shrikes of Australia (*Cracticus*) in the lengthened form of the bill and the peculiarly barred tail, and to the *Laniidæ* generally in the hooked and notched bill and strongly developed rictal-bristles.

KEY TO THE GENERA.

- a. Bill with no distinct notch on the upper mandible;
rictal-bristles absent or very feebly developed.
 - a¹. Mandible curved upwards, leaving a space
between it and the maxilla *Xenopirostris*.
 - b¹. Mandible fitting close to the maxilla.
 - a². Bill shorter and less conical; upper parts
greenish black or bright blue; underparts white. *Artamia*.
 - b². Bill long and somewhat conical, with the
culmen straight to the hooked end; plumage
above and below alike *Oriolia*.
- b. Bill with a distinct notch in the upper mandible.
 - c¹. Bill not so deep as the head.
 - c². Tail rounded; nostrils not overhung by a
membrane covered with small plumes; wing
not less than 3·5 inches.
 - a³. Bill blackish; much compressed at the sides;
culmen straight to the hook and the bare
portion dividing the frontal feathers . . . *Vanga*.
 - b³. Bill grey and wider; culmen covered by the
frontal feathers to the nostrils *Lantzia*.
 - d². Tail square; nostrils overhung by a membrane
covered with small plumes; wing less than 3
inches *Calicalicus*.
 - d¹. Bill deeper than the head and bright blue . . . *Aërocharis*.

Genus I. XENOPIROSTRIS.

Bill horn-colour, with no notch or terminal hook, but specially characterized by the mandibles meeting only towards their base and end, thus leaving an open space about half-way down their cutting edges. Wing moderately pointed, the secondaries falling short of the tip by about the length of the tarsus; first primary more than half the length of the second, the latter reaching to the tip of the secondaries. Tail shorter than the wing and very slightly rounded. Tarsi and feet deep grey and fairly strong.

Type.

Xenopirostris, Bp. Consp. Gen. Av. i. p. 366 (1850) . *X. xenopirostris*.

The genus is confined to the Island of Madagascar, and is represented by three closely allied species. In the character of the bill *Clytorhynchus*, Elliot, 1870, from New Caledonia and New Hebrides, appears to resemble it closely.

KEY TO THE SPECIES.

- a. Chin black in the males, forehead not white in the females.
 - a¹. Throat entirely blackish *polleni*.
 - b¹. Chin only blackish *xenopirostris*.
- b. Chin and throat white; in the females the forehead is also white *dami*.

Xenopirostris polleni.

Vanga polleni, Schl. in Schl. and Poll. Faun. Madag. p. 174 (1868)
Madagascar.

Xenopirostris polleni, Milne Edw. and Grand. Hist. Madag. Ois. i. p. 432, pls. 169, 170A, fig. 2 (1885); Gadow, Cat. B. M. viii. p. 110 (1883); Sibree, Ibis, 1891, p. 440; Shelley, B. Afr. i. No. 649 (1896); Sharpe, Handl. B. iv. p. 262 (1903).

Adult Male. Entire head and throat black with a violet blue gloss; a white band across the back of the neck; remainder of other parts ashy grey; sides of neck, breast and under tail-coverts white. Iris brown; bill dusky grey; feet blackish grey. Total length 8·7 inches, culmen 0·95, wing 4·7, tail 3·7, tarsus 0·95. S.E. Madagascar (Crossley).

Pollen's *Vanga* is confined to Madagascar.

The species was discovered by Van Dam in the north-western portion of the island, and in the British Museum

there is a specimen procured by Crossley in the south-eastern district, so that it evidently ranges over the whole of Madagascar. M. Humblot found the species in the dense forests on the eastern slope of the great central mountain range. According to M. Grandidier, it lives in parties of eight or ten individuals, flies low, is not wild, feeds on insects, small reptiles, frogs, &c., and is generally known by the natives as the "Kinkimavo" (grey bird).

Xenopirostris xenopirostris.

Vanga xenopirostris, Lafr. Rev. et Mag. Zool. 1850, p. 107, pl. 1
Madagascar.

Xenopirostris xenopirostris, Gadow, Cat. B. M. viii. p. 110 (1883);
Shelley, B. Afr. i. No. 650 (1896); Sharpe, Handl. B. iv. p. 262
(1903).

Xenopirostris lafresnayi, Bp. Consp. Av. i. p. 366 (1850); Milne Edw.
and Grand. Hist. Madag. Ois. i. p. 429, pls. 168, 170A, figs. 1, 170B,
figs. 1, 171 (1885); Sibree, Ibis, 1891, p. 440.

Adult male. Upper half of head, cheeks and chin black, with a green gloss; remainder of upper parts ashy grey, with the exception of a white collar; lower back whitish; quills mostly dark brown; under parts white. "Iris dark brown; bill and feet pearl-grey" (Grandidier). Total length 9·2 inches, culmen 0·9, wing 4·9, tail 3·9, tarsus 1·1.

Lafresnaye's *Vanga* inhabits Madagascar.

M. Grandidier remarks that these birds frequent the south of the island, and were only known to him as occurring on Cape St. Marie in one of the small woods scattered over the arid plateau of that district and from the neighbourhood of Tullear. They are, he observes, insectivorous and sluggish in their habits, remaining for hours on the upper branches of a shrub watching for their prey. They are here called the "Tsilovanga."

Xenopirostris dami.

Xenopirostris damii, Schl. Ned. Tijdschr. iii. p. 82 (1866) *Madagascar*; Bartlett P. Z. S., 1875, p. 66 *S.E. Madagascar*; Milne Edw. and Grand. Hist. Madag. Ois. i. p. 431, pls. 170, 170A, figs. 3, 170B, fig. 3 (1885); Gadow, Cat. B. M. viii. p. 110 (1883); Sibree, Ibis, 1891, p. 440; Shelley, B. Afr. i. No. 651 (1896); Sharpe, Handl. B. iv. p. 262 (1903).

Vanga albifrons, Pollen, Ned. Tijdschr. iii. p. 83 (1866, ♀) *Madagascar*.

Adult male. Top and sides of head, hind neck and lesser wing-coverts black, with a green gloss; remainder of wings, back and tail slate-colour, with a few white feathers on the rump; entire underparts and sides of neck white; axillaries and under wing-coverts white, under surface of quills black. "Iris brown; bill black; feet lead-colour" (Van Dam). Total length 7·4 inches, culmen 1·0, wing 4·35, tail 3·0, tarsus 0·95.

"*Immature male*," type of *V. albifrons*. Forehead, sides of head and neck and the entire underparts white, with a tinge of ochre on the breast and under tail-coverts; feathers round the eye, and upper part of ear-coverts shading into the glossy greenish black of the crown and nape; remainder of the upper parts ashy grey. Wing 4·5 inches.

Van Dam's *Vanga* is confined to Madagascar.

The original specimens were discovered by Pollen and Van Dam at Ambarohana in north-east Madagascar. Besides these, the only specimens known to Milne Edwards and Grandidier, when they published the article upon this species in their great work on Madagascar, were, one in the Paris Museum, procured by Lantz, and five in the Museum of the Island of Reunion. They remark that although Pollen records it as a solitary bird, Lantz found it in parties of from six to eight. In habits it is apparently very like the other members of the genus and is distributed over the entire island, for Mr. E. Bartlett received two adults and a young bird collected by Mr. Waters in south-east Madagascar.

Genus II. ARTAMIA.

With the exception of the greyish-blue bill, which is slighter and closes entirely throughout its length, the genus closely resembles *Xenopirostris* in all its other characters.

Type.

- Artamia, Geoffr. St. Hilaire, Nouv. Ann. Mus. Paris. i.
 p. 389 (1832). *A. viridis.*
 Cyanolanius, Bp. C. R. xxxviii. pp. 387, 538 (1854) . . . *A. bicolor.*
 Leptopterus, Bp. C. R. xxxviii. pp. 387, 538 (1854) . . . *A. chabert.*
 Abbottornis, Richmond, Pr. U. S. Nat. Mus. xix. p. 692
 (1897) *A. chabert.*

The genus includes six species, of which five are confined to Madagascar and the fifth is a native of Great Comoro Island.

KEY TO THE SPECIES.

- a.* Entire head white.
*a*¹. No white band across the lower back *viridis.*
*b*¹. A white band across the lower back *annæ.*
b. Upper half of head like the back, not white
*c*¹. Above black strongly glossed with green
*a*². Larger, wing 3·7, base of the four outer pairs of tail-
 feathers black *chabert.*
*b*². Smaller, wing 3·5, base of the four outer pairs of tail-
 feathers white *schistocerca.*
*d*¹. Above bright blue.
*c*². Smaller; wing 3·35 inches *bicolor.*
*d*². Larger; wing 3·75. *comorensis.*

Artamia viridis.

- Lanius viridis*, P. L. S. Müll. S. N. Suppl. p. 72 (1776) *Madagascar.*
Lanius leucocephalos, Gm. S. N. i. p. 307 (1788) *Madagascar.*
Artamia leucocephala, Gadow, Cat. B. M. viii. p. 107 (1883); Sibree,
 Ibis, 1891, p. 436; Shelley, B. Afr. i. No. 652 (1896); Sharpe
 Handl. B. iv. 263 (1903).
Artamia leucocephala typica, Milne Edw. and Grand. Hist. Madag.
 Ois. i. p. 405, pls. 154, figs. 1, 154A, figs. 1, 155 (1885).
 White-headed Shrike, Lath. Gen. Syn. i. p. 180 (1781).

Adult male. Entire head and the under parts white; remainder of plumage black, with a green gloss on the back and upper surface of the wings and tail. Iris light hazel; bill and feet bluish grey. Total length 7·8 inches, culmen 0·85, wing 4·3, tail 2·9, tarsus 0·95.

Adult female. Differs in having a tinge of silvery grey on the white portions of the plumage. Wing 4·2.

The Eastern White-headed Vanga is found throughout the eastern half of Madagascar.

According to Grandidier, "they inhabit the woodlands, where they are to be found in small parties of ten or a dozen, frequenting the upper branches of the trees. Their flight is rapid." The Sakalavas use the same names, "Tsetseky" and "Remavo," for both this and the next species.

Dr. Bowdler Sharpe (P. Z. S., 1875, p. 77) gives an interesting description of the variations of the plumage of this species from the quite young bird to the adult, founded on a series collected by Crossley.

Artamia annæ.

Artamia annæ, Stejneger, *Nyt Mag. Naturv.* xxiv. p. 291 (1879) *Madagascar*; Sibree, *Ibis*, 1891, p. 436; Shelley, *B. Afr.* i. No. 653 (1896); Sharpe, *Handl. B.* iv. p. 263 (1903).

Artamia leucocephala, var. *annæ*, Milne Edw. and Grand. *Hist. Madag.* Ois. i. p. 407 pl. 154, fig. 2 (1885).

Adults. Very similar to *A. viridis*, from which it differs only in having a broad white band across the lower back, and the gloss on the upper parts of a bluer shade. Total length 8.1 inches, culmen 0.8, wing 4.7, tail 3.1, tarsus 0.95.

The Western White-headed Vanga replaces *A. viridis* on the western side of Madagascar.

The white bar across the lower back, which is most conspicuous in adult individuals, readily distinguishes the species from its closely allied eastern form, with which it no doubt closely agrees in its habits. The name *A. annæ* was, I believe, suggested to Stejneger by his wife's Christian name being Anna.

Artamia chabert.

Lanius chabert, P. L. S. Müll. S. N. Suppl. p. 72 (1776).

Leptopterus chabert, Sharpe, Cat. B. M. iii. p. 282 (1877); Milne Edw. and Grand. Hist. Mad. Ois. i. p. 414 pls. 154A, figs. 2, 158, 159 (1885); Nehrkorn, Cat. Eiers. p. 21 (1899) *egg*.

Artamia chabert, Shelley, B. Afr. i. No. 654 (1896).

Abbotornis chabert, Sharpe, Handl. B. iv. p. 263 (1903).

Lanius violaceus, Bodd. Tabl. Pl. Enl. p. 3 (1783) *Madagascar*.

Lanius viridis (non Müll.) Gm. S. N. i. p. 306 (1788) *Madagascar*.

Leptopterus viridis, Sibree, Ibis, 1891, p. 436.

Analeipus hirundinaceus, Swains. An. in Menag. p. 284 (1838).

Adult male. Upper parts black glossed with green, under parts and sides of neck pure white, with the thighs and under surface of wings black. "Blue wattled eyelids; iris brown; bill pearl-grey; feet black" (Grandidier). Total length 6 inches, culmen 0.65, wing 3.7, tail 2.1, tarsus 0.65. Madagascar, ♂ (Van Dam).

Adult female. Like the male.

Immature. Upper parts inclining to rufous-shaded brown, with small white triangular marks at the ends of the feathers of the head and those of the back and wings with some white edges; under parts dusky white.

The Chabert Vanga is confined to Madagascar.

According to Grandidier's notes, they mostly frequent the small woods on either side of the island, and are rarer in the large forests. They are generally to be seen in flocks of from twenty to thirty frequenting the tops of the higher trees, where they flit from branch to branch in pursuit of insects; their flight is quick. They roost in hundreds on the isolated trees. The eggs are green, mottled with blotches of brown and rufous, and measure 0.8×0.56 . Sir E. Newton remarks of this species that, "in flight it makes tremendous dips," and apparently feeds mostly on caterpillars. The native tribes have many names for this bird, for, according to Grandidier, it is called by the Betsimisarakas "Vorán-vasatisaty," by the Sakalavas and Antakaranas "Soroanja," by the Betsilios, the Baras and the Atanalas "Fantsasatra," and by the Antaimoronas "Vantsatra."

Artamia schistocerca.

Abbotornis schistocercus, Neumann, Bull. B. O. C. xxiii. p. 11 (1908)
West Central Madagascar.

Adult. "Similar to *A. chabert* but smaller, with a much smaller bill and a differently coloured tail. Only the four median tail-feathers are black, the four outer pairs having the basal half white and the distal half black. The basal part of the feathers of the back and rump is white as well as the inner web of the outer upper tail-coverts. Culmen 0.55, wing 3.5, tail 1.95" (Neumann).

The type and only example hitherto recorded is in the Tring Museum, and was obtained in Madagascar.

Artamia bicolor.

Lanius bicolor, Linn. Mantissa, p. 524 (1771).

Artamia bicolor, Gadow, Cat. B. M. viii. p. 108 (1883); Shelley, B. Afr. i. No. 655 (1896); Sharpe, Handl. B. iv. p. 263 (1903).

Cyanolanius bicolor, Milne Edw. and Grand. Hist. Madag. Ois. i. p. 410, pls. 156, 156A, figs. 1, 157 (1885); Sibree, Ibis, 1891, p. 436.

Loxia madagascariensis, Linn. (non *Lanius madagascariensis*, *t.c.* p. 137) S. N. i. p. 306 (1766) *Madagascar.*

Cyanolanius tibialis, Stejneger, Nyt Mag. Naturv. xxiv. p. 293 (1879).

Blue Shrike, Lath. Gen. Syn. B. i. p. 178 (1781).

Adult male. Upper parts brilliant cobalt blue; quills and outer wing-coverts black, with some blue on the edges of the feathers; centre tail-feathers blue with black ends; remainder of tail black, with the greater part of the outer webs, on the upper side, excepting the outer feather, blue; a narrow band of black encircling the bill and extending over the face in front of the eye, under surface of the wings black, with the inner coverts pure white like the throat, breast, and under tail-coverts. "Iris red; bill pearl-grey, with the tip black; feet bluish grey" (Grandidier). "Iris bluish white" (Van Dam). Total length 6 inches, culmen 0.6, wing 3.4, tail 2.7, tarsus 0.7. N. E. Madagascar ♂, (Van Dam).

The Madagascar Blue and White Vanga is confined to that island.

Grandidier writes: "These beautiful birds inhabit the east and north-west of Madagascar and apparently prefer

the forests on the eastern slope of the highlands, where they may be seen frequently flitting from branch to branch on the tops of the highest trees in pursuit of their insect food; they generally congregate in parties of from fifteen to twenty, frequently uttering a little short cry, and are not shy. Their flight is rapid. They thrive well in captivity on insects, grain and cooked rice. In the north they are known as the 'Vorontsara-etra,' and their Betsimisaraka name is 'Raisa-satra.' The Rev. J. Sibree attributes the former name to *A. chabert* and adds "Fondra," "Pory" and "Sarabesa" as North Sakalava names for this species.

Pollen records the species as often found in flocks associating with other birds which frequent similar resorts.

Artamia comorensis.

Artamia comorensis, Shelley, Bull. B. O. C. iii. p. 42 (1894) *Great Comoro Isl.*; id. B. Afr. i. No. 656 (1896); ii. pl. 2, fig. 1 (1900); Sharpe, Handl. B. iv. p. 263 (1903).

Type. Similar to the adult male of *A. bicolor* but larger, and with no black tip to the bill; upper parts of a more uniform and deeper cobalt blue faintly tinted with lilac. Total length 6.5 inches, culmen 0.8, wing 3.75, tail 2.7, tarsus 0.7. Great Comoro Island (Kirk).

The Comoro Blue-and-white Vanga is confined to Great Comoro Island.

The type, a beautiful adult specimen, figured in this work (ii. p. 41), was procured on the Island of Angaziya, or Great Comoro, and was presented to me by Sir John Kirk. Like some of the other species of this island it is a larger and finer representative of the Madagascar form. To this species belongs a specimen obtained by M. Humblot, and referred to *Cyanolanius bicolor* by Milne Edwards and Oustalet in 1885.

Genus III. ORIOLIA.

Bill bluish grey, rather long and straight, with no notch, but a distinct hook at the end. The sexes differ greatly in colouring, the adult male plumage being entirely glossy greenish black, and the female, like the young male, is of a rufous-shaded brown barred with black. Tarsi and feet deep grey. In all its other characters it resembles *Artamia*.

Type.

Oriolia, Geoffr. St. Hilaire, Rev. Zool. 1838, p. 50 . . . *O. bernieri*.

The genus is confined to the Island of Madagascar and only one species is known.

Oriolia bernieri.

Oriolia bernieri, Geoffr. St. Hilaire, Rev. Zool. 1838, p. 50 *Madagascar*; Milne Edw. and Grand. Hist. Madag. Ois. i. p. 422, pls. 154A, figs. 3, 162 (1885); Sibree, Ibis, 1891, p. 436; Shelley, B. Afr. i. No. 657 (1896); Sharpe, Handl. B. iv. p. 263 (1903).

Artamia bernieri, Gadow, Cat. B. M. viii. p. 108 (1883).

Adult male. Entire plumage black, with a purplish blue gloss. "Iris, bill and feet pearl-grey" (Grandidier). Total length 9·6 inches, culmen 1·0, wing 4·7, tail 3·5, tarsus 0·9.

Adult female. Chestnut shaded brown, with narrow black bars on the feathers of the head, neck, body, and wing-coverts.

Immature of both sexes. Similar in colouring to the adult female.

Bernier's *Vanga* is confined to Madagascar.

According to Grandidier it is rare and was found by him only on the eastern slopes of the great wooded highlands of the interior of the island. It was met with in pairs among the higher branches of the trees. The male, he remarks, has a little plaintive cry and appears to be devoted to its mate, for if the female is killed the male follows it in its fall to the ground and may be easily captured, while if the male is the first victim the female at once seeks safety in flight.

Genus IV. VANGA.

Bill blackish, rather long and slender, and much compressed at the sides; upper mandible notched and strongly hooked; the bare culmen dividing the front of the feathers of the forehead. Back and wings black, the latter with a longitudinal white band. Tail, with the basal two-thirds grey, remainder black with white ends to the feathers. Tarsi and feet grey.

- Type.*
- Vanga, Vieill. Analyse, p. 41 (1816). *V. curvirostris.*
 Spasornis, Van der Hoeven, Handb. Zool. ii. p. 549
 (1852-56) *V. curvirostris.*

The genus is confined to Madagascar, and consists of two very nearly allied species.

KEY TO THE SPECIES.

- a.* Forehead, front of crown, neck and under parts pure white *curvirostris.*
b. Much more black on top of head in the males; neck and
 breast tinted with grey *griseipectus.*

Vanga curvirostris.

Lanius curvirostris, Linn. S. N. i. p. 135 (1766) *Madagascar.*

Vanga curvirostris, Milne Edw. and Grand. Hist. Madag. Ois. i. p. 423, pls. 160A, figs. 2, 166, 167; pl. 304, fig. 5 *egg* (1885); Gadow, Cat. B. M. viii. p. 104 (1883); Sibree, Ibis, 1891, p. 440; Shelley, B. Afr. i. No. 658 (1896); Sharpe, Handl. B. iv. p. 263 (1903).

Thamnophilus leucocephalus (non Gm.), Vieill., N. Dict. d'Hist. Nat. xxxv. p. 200 (1819).

Le Vanga, Buff. Hist. Nat. Ois. i. p. 312 (1770).

Adult male.—Hinder half of the crown, nape, back, upper tail-coverts and the wings black, the latter with broad white edges to the greater coverts, and to three of the secondaries; basal two-thirds of the tail ashy grey, the remainder black, with white ends to the feathers; front half of the crown, sides of head, entire neck and the under parts pure white. "Iris brown; bill black; feet pearl-grey." Total length 10·2 inches, culmen 1·1, wing 4·25, tail 4·2, tarsus, 1·1. Madagascar (Gerrard).

Adult female. Differs in having the black patch on the head broader and extending over the hinder half of the crown, while the base of the neck and the under parts are faintly tinted with grey.

The Hook-billed Vanga inhabits the northern half of Madagascar.

According to Milne Edwards and Grandidier: "the Vangas are of general distribution, at least, where there are small woods and forests, usually perching on bushes, where they remain motionless among the leaves watching for their prey, which consists mostly of orthoptera. Their flight is

rapid and straight. They live singly, and from time to time give out a piercing whistle, which reveals their presence, and is said to be most frequently heard during fine weather. The nest is placed in a bush some two or three yards from the ground and the eggs are white spotted with grey and brownish red, mostly so towards the thick end, and measure 1.2×0.84 . The bird is known on the island as the 'Vanga.' "

A nest is described by Dr. P. L. Selater (P. Z. S., 1863, p. 163) as "an open cup-shaped structure, composed of small sticks, roots and fibres, lined with rather finer materials of the same description. The interior is about $2\frac{1}{2}$ inches in diameter, the whole mass measuring 7 inches in diameter. The eggs are white, spotted with two shades of red, and measure 1.2 by 0.8 inch."

Sir Edward Newton writes (Ibis, 1863, p. 348): "Nowhere common, and from its retiring habits, much oftener heard than seen."

***Vanga griseipectus*, n. sp. (Pl. 50.)**

Types. Differ from the more northern *V. curvirostris* in the black of the head extending forward, more or less, over the whole crown; collar and under parts, with the exception of the pure white chin and under tail-coverts, pale silvery grey; the white margins on the secondaries rather narrower and less strongly marked; in the males the black on the top of the head is quite as much extended as in the females of the northern form, while the females of *V. griseipectus* have the remainder of the crown and the forehead mottled with black. Total length 9.7 and 10.5 inches, culmen 1.15, wing 4.3, tail 4.25, tarsus 1.15. Saralahan, ♂, ♀ (Crossley).

The Grey-breasted Vanga replaces *V. curvirostris* in southern Madagascar.

This species, which I here distinguish under the name *V. griseipectus* on account of the grey shade on the breast, is quite as strongly characterized by the great amount of



Vanga griseippecta. ♂ ♀

black on the upper portion of the head ; it has been referred to by Milne Edwards and Grandidier as a melanistic race of *V. curvirostris*. No doubt, in habits, the two species are very similar, both being known to the natives by the common name "Vanga."

Genus V. LANTZIA.

Bill grey and rather wide ; upper mandible hooked and notched, the base entirely covered with bristles down to the nostrils. Back, wings and tail uniform chestnut. Tarsi and feet grey.

Type.

Lantzia, Hartl. Vög. Madag. p. 194 (1877) *L. rufa*.

The genus is represented by one species, confined to Madagascar.

Lantzia rufa.

Lanius rufus, Linn. S, N. i. p. 137 (1766) *Madagascar*.

Lantzia rufa, Milne Edw. and Grand. Hist. Madag. Ois. i. p. 418, pls. 160, 160A, figs. 1, 161 (1885) ; Sibree, Ibis, 1891, p. 436.

Vanga rufa, Gadow, Cat. B. M. viii. p. 105 (1883) ; Shelley, B. Afr. i. No. 659 (1896) ; Sharpe, Handl. B. iv. p. 263 (1903).

Lanius madagascariensis (non Linn.) Temm. Tabl. Méthod. p. 19 (1838).

Rufous Shrike, Lath. Gen. Syn. i. p. 180 (1781).

Adult male. Entire head and neck black, with a bluish green gloss ; remainder of the upper parts bright chestnut, with the inner portion of the quills dark brown ; under surface of wings dull brown with rufous inner margins ; breast and under tail-coverts white. Iris red ; bill and feet pearl-grey (Grandidier). Total length 7·8 inches, culmen 0·8, wing 4·1, tail 3·0, tarsus 0·95. Madagascar, ♂ (Verreaux).

Adult female. Differs from the adult male in having the sides and back of neck pearl grey, the cheeks, chin and throat white, and the crop and flanks tinged with grey. Total length 7·8 inches, culmen 0·8, wing 4·0, tail 3·6, tarsus, 0·95. Saralahan, ♀ (Crossley).

Immature. Differs in having the entire upper parts rufous brown and the crop slightly shaded with that colour. The black first appears on the forehead and sides of head and the brown shade disappears from the crop.

The Rufous Vanga is confined to Madagascar.

Grandidier writes : "These birds inhabit the forest, where they are to be seen in parties of five or six seeking their

insect food among the upper branches of the high trees; they frequently emit a sharp cry, and on being disturbed vanish at once in the foliage. They are known to the Betsimisarakas as the 'Siketri-ala.'"

Genus VI. CALICALICUS.

Bill black, rather short, compressed beyond the nostrils, hooked, and with a distinct notch, nasal apertures overhung by a membrane covered with small feathers. Wing structure the same as in the other members of this family. Tarsi and feet dark grey. The sexes differ considerably in the male only having the front of the head, region of the eye and the throat black.

Type.

Calicalicus, Bp. C. R. xxxviii. p. 535, 1854 . . . *C. madagascariensis*.
 Hylophorba, Sclater, P. Z. S. 1865, p. 326 . . . *C. madagascariensis*.

The genus is confined to Madagascar and comprises only one species.

Calicalicus madagascariensis.

Lanius madagascariensis, Linn. S. N., i. p. 137 (1766).

Calicalicus madagascariensis, Milne Edw. and Grand. Hist. Madag.

Ois. i. p. 440, pls. 164, 164A, figs. 1, 165 (1885); Gadow, Cat. B. M.

viii. p. 119 (1883); Sibree, Ibis, 1891, p. 440; Shelley, B. Afr. i.

No. 660 (1896); Sharpe, Handl. B. iv. p. 264 (1903).

Hylophorba rutililla, Sclat. P. Z. S. 1865, p. 326, pl. 13, ♀.

Adult male. Front of head, region of eyes and the entire throat black; a narrow white band separates the black of the forehead and sides of the head from the crown, widening out over the space between the back of the head and throat and extending over the ear-coverts; crown, back of neck and the mantle deep ashy grey; scapulars, lesser wing-coverts, lower back, upper tail-coverts, and tail bright chestnut-red, with the two centre tail-feathers and tips of the others ashy brown; remainder of the wings dark brown, with paler edges to the feathers; breast and under tail-coverts white, mottled on the flanks with chestnut-red; under wing-coverts and inner edges of the quills white, remainder of quills dark brown. "Iris brown; bill black; feet slaty grey" (Grandidier). Total length 5.2 inches, culmen 0.45, wing 2.7, tail 2.25, tarsus 0.75. Madagascar ♂ (Crossley).

Adult female. Differs from the male in having the upper half of the head uniform grey, with a white loreal band extending round the eye; throat white; scapulars and wing-coverts ashy grey like the mantle, and the lower back ochreous brown. Madagascar ♀ (Crossley).

The Red-tailed Vanga is confined to Madagascar.

"These very small Shrikes," as Grandidier remarks, "frequent the forests, where they flit among the branches in pursuit of insects, especially beetles. They hunt in pairs and are silent birds. The Betsimisarakas call them 'Kiboala,' the Betsilos 'Totikirisoy,' and the Antenales' name for them is 'Tsikateokateoka.'" According to the Rev. J. Sibree this bird is known to the North Sakalavas by the following names: "Titikorosy," "Fitilitatema" and "Vorombenda."

The genus *Hypophorba* with *H. ruficilla* for type was founded on a female of the present species procured by Mr. Plant at Anooivarika.

Genus VII. AËROCHARIS.

Bill, glossy blue, strongly hooked and notched towards the end of the upper mandible, much compressed at the sides beyond the culmen, and deeper than the skull owing to its being much raised and arched. Rictal and nasal bristles obsolete. Wing very similar in structure to those of the other members of the family. Tail shorter than the wing and rounded. Tarsi and feet blackish. In immature birds there are pale bars on the plumage.

Type.

Euryceros, Less. (non Fabr. *Insect.*) Centur. Zool. 1830,

p. 217 *A. prevosti.*

Aërocharis, Gistal, Nat. Thierr. p. ix. (1848) *A. prevosti.*

The genus is confined to Madagascar and is represented by one species.

Aërocharis prevosti.

Euryceros prevosti, Less. Cent. Zool. p. 217, pl. 74 (1830) *Madagascar*;

Sharpe, Cat. B. M. iii. p. 326 (1877); Milne Edw. and Grand. Hist.

Madag. Ois. i. p. 435, pls. 172-176 (1885); Sibree, Ibis, 1891, pp. 434, 442; Shelley, B. Afr. i. No. 661 (1896).

Aërocharis prevosti, Sharpe, Handl. B. iv. p. 275 (1903).

Adult. General plumage black, with the back, scapulars, wing-coverts, tail-coverts and two centre tail-feathers chestnut. "Iris pale brown; bill rich deep blue, feet blackish" (Grandidier). Total length 12 inches, culmen 2.6 and 2.3, wing 5.9, tail 5.0, tarsus 1.2 and 1.0. ♂ and ♀, Madagascar.

Immature. Entire upper parts dull rufous brown, with the primaries darker brown; under parts brown with some narrow white bars.

Prevost's Helmet-bird is confined to the Island of Madagascar.

According to Milne Edwards and Grandidier, it inhabits the large forests of the eastern side of the island, where parties of three or four silently wend their way through the tangled boughs in search of large beetles and other insects which form their staple food. Their flight is heavy and undulating, and they are known to the Betsimisarakas as the "Siketribé." In the Sakalava language, the Rev. J. Sibree informs us, they are called "Fondrampory" and "Vorontsarakesa."

Family III. CAMPOPHAGIDÆ.

The members of this family, commonly known as the Cuckoo-Shrikes, are specially characterized by the feathers of the back, the shafts of which terminate in sharp spines, to be readily felt by passing the finger against them from the tail towards the mantle. The bill and feet are blackish, and of moderate size, and in their other characters they agree fairly well with the *Vangidæ* and *Laniidæ*, and, like the members of those families, the scutellation of the tarsus is confined to the front, the sides and back being bilaminated, not covered with small scales as in the *Prionopidæ*.

The family *Campophagidæ* comprises more than one hundred species: it extends eastward from the Ethiopian region over southern Asia, the Philippines, New Guinea, Australia, and the intervening islands of the Pacific.

KEY TO THE GENERA.

- a.* Males, with some metallic gloss; females with some bright yellow in the plumage.
 - a*¹. With bare wattles at the gape *Lobotos.*
 - b*¹. No wattles at the gape; males mostly black *Campephaga.*
- b.* No metallic gloss in either sex, and no bright yellow in the plumage.
 - c*¹. Upper parts grey or blue, alike in both sexes; the sharp shaft-spines of the back more strongly developed *Coracina.*
 - d*¹. Upper parts grey in the males, brown in the females; the shaft-spines of the back less developed *Oxynotus.*

Genus I. LOBOTOS.

An orange pendant wattle at the gape, much larger in the males than in the females. Head and neck black, strongly glossed with green in the adult males; mantle olive-yellow; lower back and under parts yellow, richly shaded with chestnut in the males; tail-feathers with yellow ends.

Type.

Lobotos, Reichenb. Syst. Av. pl. 54, fig. 2 (1850) *L. lobatus*.

The genus is represented by two species, which are confined to the West African subregion.

KEY TO THE SPECIES.

- a.* Under parts rich chestnut. *lobatus*.
b. Under parts yellow, a little orange on the chest *oriolinus*.

Lobotos lobatus.

Cebilepyris lobatus, Temm. Pl. Col. livr. 47, pls. 279, 280 (1824) *Sierra Leone*.

Lobotos lobatus, Sharpe, Cat. B. M. iv. p. 58 (1879); Shelley, B. Afr. i.

No. 673 (1896); Reichenb. Vög. Afr. ii. p. 522 (1903).

Lobotos temmincki, Hartlaub, J. f. O. 1854, p. 31, *Guinea*.

Adult Male. Head and neck deep glossy green, with a large pendent orange wattle at the gape; mantle and wing-coverts olive yellow, brightest towards the glossy green of the neck, where it is washed on the sides with chestnut; primary-coverts and quills black, the latter with incomplete pale edges, white on the primaries and yellow on the secondaries; under surface of quills black with broad white inner margins; under wing-coverts bright yellow; lower back, upper tail-coverts and the breast chestnut, the thighs and under tail-coverts bright yellow; tail black, the centre feathers washed with olive yellow, and the others have bright yellow ends increasing in size towards the outer ones. Iris yellow, bill and feet black. Total length 7·3 inches, culmen 0·55, wing 3·7, tail 3·5, tarsus 0·8. Fantee (Ussher).

The Wattled Cuckoo-Shrike ranges from the Gold Coast into Cameroon.

This is a rare species in collections and I can find no notes regarding its habits. It is represented in the British Museum by two apparently adult males, one procured in

Fantee by Governor Ussher, and the other in Ashantee by Sir Godfrey Lagden.

Lobotos oriolinus.

Lobotos oriolinus, Bates, Bull. B. O. C., xxv. p. 14 (1909) *Assobam, Cameroon*; Ibis, 1911, p. 535, pl. viii.

Adult Male. Head, neck, throat and crop black, with a greenish lustre, back and wing-coverts yellowish-olive, becoming more yellow on the rump and upper tail-coverts and pure yellow on the nape; quills and primary coverts black, the primaries margined with whitish, the secondaries with yellow; middle tail-feathers dusky washed with olive green; other feathers black with broad yellow tips becoming more extensive towards the outer pair which are half yellow, under parts bright yellow shaded with orange-yellow on the breast, under wing-coverts and axillaries pale yellow. Iris dark brown, wattle at gape orange, bill and feet black. Length 8.0, wing 3.9, tail 3.1, culmen 0.4, tarsus 0.65. *Assobam, ♂, type, 8. 12. 08 (Bates).*

Female. Differs in having the head and neck dusky brown somewhat mixed with yellow, the latter colour prevailing on the forehead, the yellow of the rump and under parts is less bright and there is no orange on the breast. The soft parts including the wattle are coloured as in the male, but the latter is very small and hardly shows in the dried skin. Wing 3.7. *Assobam, ♀ (Bates).*

Of this recently described species Mr. Bates writes: "These birds were not uncommon at the place where I collected, at Assobam on the Bamba River, in the Njiem or Lima country near the eastern border of the Cameroon Colony. A male was also obtained at a place on the River Ja, on the way to the Njiem country. All were adult birds, with more or less enlarged breeding-organs and some were moulting. The food found in their stomachs was generally caterpillars, but sometimes grasshoppers or other insects. They were inactive birds, and never seen in flight but always perched, silent and solitary, among the leaves of small trees. Their resemblance in colour to *Oriolus laetior* is such that neither my boys nor I, if we could not see the bill, could distinguish them when seen perched in a tree."

This species appears to take the place of the more richly coloured *L. lobatus* in Cameroon, whence it probably extends to Gaboon and Angola. Du Chaillu obtained a specimen at the Camma River in the former country, which, judging from Cassin's remarks (Proc. Acad. Philad., 1859, p. 52), is a female, while Hartlaub states that there is another specimen in the Leyden Museum.

Genus II. CAMPEPHAGA.

Bill black, rather short and flattened, broad at the gape and compressed beyond the nostrils. Sexes very dissimilar in colouring, the adult males being black, with a distinct gloss, and with or without a yellow or red patch on the wing-coverts, while the plumage of the females and young males consists of a mixture of olive, yellow and white with no gloss, generally with black bars more or less in evidence.

Type.

- Campephaga, Vieill. Analyse, p. 39 (1816) *C. nigra*.
 Lanicterus, Less. Ann. Sc. Nat. (2) ix. p. 169 (1838) . *C. xanthornoides*.
 Cyrtes, Reichenb. Avium. Syst. pl. 68, fig. 11 (1850) . *C. phænicea*.

The genus is confined to Tropical and South Africa, for I look upon the Asiatic genus *Volvicivora*, Hodgs., as distinct.

I have divided the genus into eight species. The range of *C. hartlaubi* is the same as that of *C. nigra* and its only distinguishing marks, the lemon yellow on the wing-coverts of adult males, is variable in amount, two facts which tend to prove it to be a variation only. In like manner, *C. xanthornoides* occurs only where *C. phænicea* is found and an intermediate form is known in the type of *C. ignita*.

KEY TO THE SPECIES.

- a.* Breast and general plumage blackish . . . *Adult males*.
*a*¹. No red or orange on the wing-coverts.
*a*². Wing-coverts entirely black.
*a*³. Throat and sides of head rich purple *quiscalina*.
*b*³. Throat and sides of head blacker,
 with a blue or green gloss.
*a*⁴. Plumage with a bluer gloss . . . *petiti*.
*b*⁴. Plumage with a green gloss . . . *nigra*.

Adult female. Forehead, crown and back of neck ashy grey, passing into uniform olive yellow on the back, scapulars, wing-coverts and edges of quills; tail pale olive-shaded brown fading into sulphur yellow along the outer margin, and towards the ends of the four outer pairs of feathers; sides of forehead whitish and a narrow bar over the eyes as well as the eyelids white; a black band through the eye from the gape; cheeks, ear-coverts, chin and upper throat white; remainder of under parts golden yellow; under wing-coverts and pale incomplete margins to the quills bright yellow, slightly paler than the breast; remainder of quills dark brown. Total length 7.4 inches, culmen 0.65, wing 3.7, tail 3.7, tarsus 0.7. Wasa ♀, 3.73 (Blissett).

Immature. Similar to the adult female but mottled with the black feathers of the adult Ekrafull ♂ (Blissett); or with an irregular amount of dark bars on the hind neck, back, wing-coverts, breast and under tail-coverts. Denkera (Aubinn).

Apparently the younger the bird, the more numerous are the dark bars, and the males assume the plumage of the adult females before acquiring any black feathers.

The Purple-throated Cuckoo-Shrike ranges from Sierra Leone into Angola, and eastward to 36° E. long.

In August, 1903, Mr. Kemp obtained an adult male near Bo, in the neighbourhood of Sierra Leone, but in his paper he confused it with a Glossy Starling. He writes: "It was by itself, late in the afternoon, and kept making a singular, rather plaintive note." This is the first record of the species from so far north, and in Liberia it has been obtained at Messurado and Oldfield only. It is perhaps most abundant from the Gold Coast to Camaroon, for the British Museum contains several specimens from Fantee, including the type. There are also specimens collected by Blissett at Wasa and Ekrafull, two of Aubinn's from Denkera and one from Accra. T. E. Buckley shot the male here described at Abouri in the Aguapim Mountains, where Dr. Reichenow obtained the type of his *C. fulgida*, and more recently Dr. Büttner has met with the species in Togoland.

In Camaroon Mr. Sjöstedt saw it occasionally near Ekundu, frequenting the bush, and obtained a young bird

there in February. The type of *C. preussi*, a female, came from Mount Victoria. These Cuckoo-Shrikes have also been procured at Bipimbi (Zenker), and Efulen (Bates). In Gaboon it has been recorded from the Rio Benito (Tessmann), Fernand Vaz (Marche and De Compiègne), the Camma and Muni Rivers (Du Chaillu). In the British Museum there are a full-plumaged male and female from Landana (Petit and Lucan).

In its most eastern range Mr. Jackson has collected several specimens in the Nandi country and at the Eldoma Ravine in British East Africa.

Campephaga petiti.

Campophaga petiti, Oust. Ann. Sc. Nat. (6) xvii. Art. 8, p. 1 (1884)
Landana; Reichen. Vög. Afr. ii. p. 519 (1903); O. Grant, Bull.
 B.O.C. xix. p. 87 (1907); id. Trans. Zool. Soc. xix. p. 388 (1910)
Ruvenzori.

Adult male. Very similar to *C. nigra*, from which it differs in having the under surface of the quills blackish grey without or with only the faintest trace of the yellowish wash on the margin of the inner webs so conspicuous in the other species. Iris dark brown; bill black, yellow at the gape; feet black. Length 8.0, wing 4.0, tail 3.7, culmen 0.60, tarsus, 0.75. Ruwenzori ♂, 17.6.06 (Dent).

Female. Somewhat similar to that of *C. quiscalina*, but differs in having the crown dusky olive, with blackish shaft-stripes; hinder neck and upper back olive, with indistinct black and yellow bars, passing into bright yellow with black bars on the lower back, upper tail-coverts, scapulars and lesser wing-coverts; remainder of the wings black, with broad bright yellow ends to the median and greater coverts; quills with yellow terminal margins broadest on the inner secondaries and obsolete on the primaries; some imperfect bright yellow margins to the quills, strongly marked on the end half of the secondaries and the base of the primaries, are also present on their end half. Iris brown; bill and feet black. Total length 8 inches, culmen 0.6, wing 4.0, tail 3.8, tarsus 0.7. Kiberau ♀ (Jackson).

Petit's Cuckoo-Shrike ranges from Loango southward into Angola and eastwards through the Belgian Congo to the

Nandi country, where an example now in the Tring Museum was collected by Dr. Ansorge.

The type was discovered by Petit at Landana, where he also procured an adult male of *C. quiscalina*, which is now in the British Museum. Dr. Reichenow records both *C. petiti* and *C. nigra* from Leopoldsville (Bohndorff) and from Malandje (Mechow). In the British Museum there is a fine specimen of *C. petiti* in nearly full female plumage, obtained by Mr. Monteiro, and labelled "♀, Angola," and another, a male, from Gaboon collected by Du Chaillu, while a single example, also a male, was obtained by the Ruwenzori expedition in the Mpanga Forest on the eastern slopes of the mountain at an elevation of 5,000 feet. In one of Mr. Jackson's recent collections there are two female specimens from Kiberau, in Toro.

Campephaga nigra.

Campephaga nigra, Vieill. N. Dict. x. p. 50 (1817) *S. Africa*; Sharpe, Cat. B. M. iv. p. 62 (1879); Shelley, B. Afr. i. No. 675 (1896); Stark and Sclater, Faun. S. Afr. B. ii. p. 269 (1901); Reichen. Vög. Afr. ii. p. 518 (1903); Shortridge, Ibis, 1904, p. 190 *Pondoland*; Jackson, Ibis, 1906, p. 538 *Ankole*; O. Grant, Ibis, 1908, p. 304 *S. W. Uganda*; Haagner and Ivy, J. S. Afr. Orn. Union, 1907, p. 98, pl. iii, fig. 9 *egg*; O. Grant, Trans. Zool. Soc. xix. p. 388 (1910); Neave, Ibis, 1910, p. 132.

Campephaga flava, Vieill. N. Dict. x. p. 49 (1817), ♀ *S. Africa*; Sjöstedt, Kilimandjaro-Meru Exped. Vög., p. 111 (1910).

Cebblepyris melanoxanthus, Licht. Verz. Doubl. p. 51 (1823) *S. Africa*.

Muscipeta labrosa, Swains. Zool. Illustr. (1) iii. pl. 179 (1823) *Gt. Fish River*.

Cebblepyris ater, Less. Traité, p. 369 (1831) *Cape*.

Laniaterus swainsoni, Less. Ann. Sc. Nat. (2) ix. p. 170 (1838).

L'Echenilleur jaune, Levaill. Ois. d'Afr. iv. p. 49, pl. 164 (1805) *S. Africa*.

L'Echenilleur noir, Levaill. t.c. pl. 165, *S. Africa*.

Adult male. Black, strongly glossed with deep green on the head, neck, back, wing-coverts, edges of quills and tail-feathers and the whole of the under parts; quills beneath washed with yellow on their inner webs. Iris dark brown; bill black, yellow at the base; feet brownish black. Total

length 8 inches, culmen 0.55, wing 3.9, tail 3.9, tarsus, 0.75. Durban (Gordge).

Adult female. Upper parts ashy brown, with a wash of yellow on the head, neck and mantle; scapulars, middle and lower back barred with black wings and tail dusky brown, with bright yellow edges to all but the six centre tail-feathers, which are washed with olive yellow; throat and under-surface of body white, the feathers mostly barred with black and some, especially on the sides of the body, washed with yellow; under wing-coverts and the outer three pairs of tail-feathers with the bright yellow of their ends rapidly increasing towards the outer one, where it covers more than half of the feather and extends over nearly the whole of the outer webs of it and the next feather; throat and under surface of the body white, the feathers mostly barred with black, and some, especially on the sides of the body, washed with yellow; under wing-coverts and very broad, incomplete inner edges to the quills bright yellow; wing 4.0. Durban (Gordge).

The Black Cuckoo-Shrike ranges over Africa south from the Congo on the west, and from the Equator, in Central and Eastern Africa.

Dr. Reichenow is right in referring the *C. nigra* of Marche and De Compiègne's collection, from Fernand-Vaz to *C. quiscalina*, which is known to inhabit that country, while the present species has not otherwise been recorded from Gaboon; I doubt its having been obtained by Falkenstein at Chinchonxo, in Loango, where it appears to me to be entirely replaced by *C. quiscalina*, which is, I believe, the only representative of the genus known from the Congo, below Léopoldville.

C. nigra is apparently distributed over the entire southern waterbasin of the Congo, for specimens have been recorded from Kassongo (Bohndorff) and Lake Tanganyika (Storms), the Kuango River (Mechow) and Malange (Schütt). Anchieta has collected specimens in Benguella at Quissange, Biballa and Galanga, at which latter place it was called the "Ganjamdumbo" by the natives, who, in the Humbe district, distinguish the male as the "Melombe," and the female as the "Temboandangui." The species has also been procured

by Van der Kellen in the upper Cunene district, and by Eriksson at Ochimbora. Andersson first observed the Black Cuckoo-Shrike in the neighbourhood of the Okavango River, where it was rare and shy, keeping mostly to the upper branches of the large trees. There is another of his specimens from Elephant Vley, the most southern range known for these birds on the west coast.

Layard writes: "This species is not uncommon in the forests of the Knysna, and we have seen it from Swellendam." When I was at Durban I rarely saw the species alive, but Mr. Gordge collected for me in the neighbourhood a fair series of Cuckoo-Shrikes, including an equal number of the present one and of *C. hartlaubi*. Mr. T. Ayres remarks that the few he saw in Natal were solitary birds; one he shot was observed frequently to fly down from the tree on which it perched on to the ground to pick up caterpillars. Mr. W. L. Sclater writes: "The Black Cuckoo-Shrike is to be found in nearly all the forest districts of South Africa, if carefully looked for, but its somewhat silent, shy habits, as well as the secluded nature of its favourite haunts, renders the search an uncertain one. When met with it is usually a solitary bird; sometimes a pair, or, towards the end of the nesting season, a small party of three or four are seen, the parents with their young, for these birds seem rarely to rear more than two, and frequently only one young one in a season. The male Cuckoo-Shrike may be sometimes seen perched on a branch in the attitude of a Drongo, but can be distinguished from the latter by his square tail; when flying he is not unlike a Black Cuckoo in appearance, while the female Cuckoo-Shrike very closely resembles the female of the Emerald Cuckoo both in attitude and flight, as well as in pattern of coloration. More often these Cuckoo-Shrikes are seen quietly and slowly stealing through the tops of the

bushes and trees carefully searching the twigs and leaves for caterpillars, spiders and other insects as they go, and occasionally flying down to pick a fallen morsel from the ground. They are usually silent birds, but sometimes utter a single harsh note. The nest, singularly small compared with the size of the bird, is saddled on a fork near the extremity of a branch, and usually at some height above the ground, so that it is either altogether invisible from below, or looks like some slight growth or excrescence of the bark. It is built of a few fine twigs and a little moss bound together with spiders' webs and thickly covered with grey lichens. The eggs, two in number, are grey-green in ground colour, uniformly spotted and streaked all over with brown. They measure, on an average, 0.90×0.68 ."

From the Zambesi, Mr. Boyd Alexander writes: "Observed singly and in pairs towards the breeding season, which commences in December. They keep much to the tall acacia trees and their flight is rapid and straight. The glossy steel-black of their plumage serves always to distinguish them from the Drongo Shrikes, in whose company they are not unfrequently found." To the north of this river these Cuckoo-Shrikes are abundant through British Central Africa, whence specimens have been received from nine different localities, and in like manner they are generally distributed over the whole of Portuguese and German East Africa. Böhm records its occurrence throughout the country he explored between Zanzibar and Lake Tanganyika, but found it most plentiful to the west of that lake in the mountains of the Marungu country. Fischer likewise found the birds common in German East Africa northward to Mombasa, and observed them capturing insects on the wing like Flycatchers, and hunting over the leaves of the trees for caterpillars. This latter habit was recognized by Levillant, who gave to this

group of birds the name of "Echenilleurs" or caterpillar hunters. In its most northern known range it has been obtained at Taveita and Teita (Hunter), Kilimanjaro region (Sjöstedt), Ndi (Hildebrandt), Nandi and Mwashí (Ansorge), south-east of Ruwenzori (Dent).

Campephaga hartlaubi.

Laniaterus hartlaubii, Salvad. Ann. Mus. Genov. 1873, p. 439 *Benguella*.

Campephaga hartlaubi, Sharpe, Cat. B. M. iv. p. 62 (1879); Shelley, B. Afr. i. No. 676 (1896); Stark and Selater, Faun. S. Afr. B. ii. p. 272 (1901); Reichen. Vög. Afr. ii. p. 520 (1903); Shortridge, Ibis, 1904, p. 190 *Pondoland*; O. Grant, Ibis, 1905, p. 202 *Uganda*; Haagner and Ivy, J. S. Afr. Orn. Union 1907, p. 98, pl. iii. fig. 6, *egg*; Sjöstedt, Kilimanjaro-Meru Exped. Vög. p. 111 (1910).

Differs from *C. nigra* as regards the adult males only, which are distinguished by having a pale patch on the wing-coverts, formed by about half of the lesser and median coverts being bright lemon yellow. Total length 8.1 inches, culmen 0.55, wing 4.0, tail 3.9, tarsus 0.75. Durban (Gordge).

Hartlaub's Cuckoo-Shrike ranges over Africa southward from Benguella on the west, and from the neighbourhood of the Equator in the central and eastern portions of the continent.

Owing to the present species and *C. nigra* being alike in their size and habits as well as in the colouring of their females it is difficult to define any positively distinct range for them; and as the amount of yellow on the wings of the males of the present species is somewhat variable, it is possible, though improbable, that *C. hartlaubi* may be only a variety of *C. nigra*. The species is represented, in the British Museum, by full-plumaged males from Kingwilliamstown, one specimen in which there is more black than yellow on the lesser and median wing-coverts; two from Pondoland; several from Natal; and one from Zomba in the Upper Shire district. The type came from Benguella, where Anchieta has procured speci-

mens at Biballa and Quillengues, and, according to his notes, it is known at the former place as the "Bimba." The species has also been recorded from Zululand (Woodward), Muansa and Muniuni (Neumann), Arusha, Nawasha Lake and Kifuni (Fischer), and Kilimanjaro (Sjöstedt). It has been mentioned from Nandi and Uganda, which localities I look upon as doubtful, as full-plumaged males have not yet been obtained in either of those countries. The egg is figured by Messrs. Haagner and Ivy, and is stated to be distinguishable from that of *C. nigra* by its greyer ground-colour and by its shorter ovate shape.

Campephaga phœnicea.

Ampelis phœnicea, Lath. Ind. Orn. i. p. 367 (1790) *Africa*.

Campephaga phœnicia, Swains. B. W. Afr. i. p. 252, pls. 27, ♂, 28, ♀ (1837); Sharpe, Cat. B. M. iv. p. 59 (1879); Shelley, B. Afr. i. No. 678 (1896); Reichen. Vög. Afr. ii. p. 521 (1903); Neum. J. f. O. 1905, p. 214; Erlanger, t.c. p. 689 *N.E. Africa*; Butler, Ibis, 1909, p. 80 *Bahr el Ghazal*; Reichen. Mitt. Zool. Mus., Berlin, v. p. 221 (1911) *Cameroon*.

Tanagra dubia, Shaw, Nat. Misc. vii. pl. 252 (1796).

Turdus phœnicopterus, Temm. Pl. Col. livr. 12, pl. 71 (1821).

Ceblepyris ignatii, Heugl. Sitz. Ak. Wien. xix, p. 284 (1856, *nom. nud.*).

Adult male. Black strongly glossed with deep green on the head, neck, back, edges of quills and tail-feathers, and the whole of the under parts as in *C. nigra*, from which it differs in having the lesser and median coverts bright red with a subterminal bar of pale yellow next to their white bases; under surface of the quills with yellowish inner margins. Iris dark brown; bill black with the gape yellow; feet black. Total length 8 inches, culmen 0.6, wing 4.1, tail 4.0, tarsus 0.75.

Adult female. Similar to that of *C. nigra*, but with less bright yellow on both the wings and tail; the yellow on the three outer tail-feathers being confined to the terminal quarter of their inner webs and only extending down the final half of the exterior web of the outer feather. Wing 3.2.

The Red-shouldered Cuckoo-Shrike ranges over northern Tropical Africa between the Equator and 15° N. lat.

This species, like *C. nigra*, is accompanied throughout its

range by a very similar form, *C. xanthornoides*, distinguishable only by the full-plumaged males having the bright patch on the wing-coverts orange instead of red, and *C. ignea* appears to me to be only an intermediate variety; but, as with *C. hartlaubi* and *C. nigra*, I shall here treat them as distinct species.

The Red-shouldered form figured by Swainson is the common Cuckoo-Shrike of northern Tropical Africa. From Senegal to the Niger it is abundant and well represented in the British Museum from Senegal, Gambia, the Gold Coast and the Niger. In Equatorial Central Africa it has been recorded from the Ubangi River, a tributary of the Congo (Dybowski). This specimen should, as Dr. Reichenow suggests, belong to his *C. ignea* obtained by Emin in the Ndussuma country to the west of the Albert Nyanza, but he considers that Emin's specimens from Magungo to the north of that lake and from Wakkala and Tarrangole belong to the typical race. Between these places and the Victoria Nyanza, specimens have been collected in the Bulamwesi country and at Kwa Mtessa (Neumann). I have seen a specimen from Entebbe, in Mr. Leslie Seth-Smith's collection, and it has also been obtained there by Mr. Jackson.

In the Djur country Antinori found this species, with the young just able to fly, in September and October. Heuglin met with them in full plumage and abundant along the Gorgora Mountains in February, also at Gondar, the Gazelle, and Rek Rivers and from Wau and Bongo to the Kosango River, in the Bari country and at Fazogl. His hunters told him that it was not uncommon in the warmer parts of Abyssinia, where few have remarked it, possibly owing to its quiet and unobtrusive habits. Esler has procured several specimens in Bogos; Antinori found it along the Anseba River and Jesse obtained it at Senafé. Lord Lovat shot two specimens in southern

Abyssinia at Kombolsha and Kondura, and writes: "On each occasion a pair was seen in lightly wooded country and in the immediate vicinity of a village. It is of tame habits." Mr. J. J. Harrison obtained a specimen at Gardula between the Lakes Margarita and Stefanie, and a large series has been collected in the Gallaland district towards the Kaffa country by Mr. Oscar Neumann, and by Erlanger between Harrar and the mouth of the Jub River, which is the most eastern range known for the species.

I have not found any information regarding the breeding habits of this species, but we may presume them to be very similar to those of *C. nigra*.

Campephaga ignea.

Campephaga ignea, Reichen. J. f. O. 1902, p. 258 *Nyangabo*; id. Vög. Afr. ii. p. 522 (1903).

Campephaga phœnicea, Oust. Nat. 1893, p. 126 *Ubangi R.*

"Differs from *C. phœnicea* only in having the bright patch on the wing-coverts much paler, fiery red. Wing 3·76 to 4·0 inches.

"The female resembles that of *C. phœnicea*, but the crown, hind neck, and upper back are washed with green" (Reichenow).

The Flame-shouldered Cuckoo-Shrike inhabits the Ndusuma country on the west side of the Albert Nyanza.

The types, a male and female, were obtained by Emin at Nyangabo, and Dr. Reichenow suggests that the *C. phœnicea* of Oustalet, obtained by Dybowski at the Ubangi River, a northern tributary of the Congo, possibly belongs to this form. But I look upon it as very doubtfully distinct from the typical *C. phœnicea*, being apparently intermediate between that form and typical *C. xanthornoides*. To which of these three forms belong a female specimen procured by Bohndorff at Ndoruman it is impossible to say.



1. *Campephaga xanthornoides*
2. *Coracina azurea*

Campephaga xanthornoides. (Plate 52, fig. 1.)

Lanicterus xanthornoides, Less. Ann. Sc. Nat. (2) ix. p. 169 (1838)
Gambia.

Campophaga xanthornoides, Sharpe, Cat. B. M. iv. p. 60 (1879); Shelley
B. Afr. i. No. 677 (1896); Reichen. Vög. Afr. ii. p. 521 (1903);
Neum. J. f. O. 1905, p. 214; Zedlitz, J. f. O. 1910, p. 794 *Eritrea*;
Koenig, Ber. V. Intern. Orn. Kongr. 1910, p. 513, pl. 4 *Egyptian*
Soudan; Reichen. Mitt. Zool. Mus. Berl. v. p. 221 (1911)
Cameroon.

Differs from *C. phænicea* only in the adult males having the bright portion of the wing-coverts chrome yellow, paler towards their bases. Total length 8 inches, culmen 0.55, wing 3.9, tail 3.9, tarsus 0.75. Fantee (Swanzy).

The Orange-shouldered Cuckoo-Shrike ranges from the Gold Coast eastwards to Abyssinia and Gallaland.

I believe this form to be really only a variety of *C. phænicea*. It is rare in collections, the males only being recognizable; of these there are four in the British Museum from West Africa, of which one is from Fantee (Swanzy) and one from Accra (Haynes). Mr. Oscar Neumann records one from Elmina in the Stuttgart Museum; one of his own collecting from Andaratsha, the capital of the Kaffa country, and two in the Tring Museum from Salomona (Schrader) in Eritrea. This Cuckoo-Shrike has also been obtained at the Anseba River (Antinori) in Bogosland (Esler), and recently at Entebbe (W. F. Fox) and at Gemesa on the Upper White Nile (Koenig).

Campephaga rothschildi.

Campephaga rothschildi, Neumann J. f. O. 1907, p. 594, *Boranaland*.

"Closely allied to *C. xanthornoides* but easily distinguished by the colour of the second and third of the greater wing-coverts, which are bright yellow for their whole extent, so that there is a yellow patch on the wing below the orange-yellow shoulder patch." (Neumann.)

One example of this species, recently described by Neumann, was collected by Baron Maurice de Rothschild

at Gmezo, in Boranaland, south of Lake Stephanie, on May 24, 1905, during his journey from Shoa to British East Africa.

Additional specimens must be obtained before this can be regarded as anything more than a variation or mutation.

Genus III. CORACINA.

Feathers of the middle and lower back, with hidden, strong, sharply pointed shafts; back uniform grey or blue, alike in both sexes; no part of the head bare. Bill black, rather wide and neither strongly hooked nor notched; rictal-bristles obsolete. Wing long and pointed, slightly longer than the tail, which is rounded. Tarsi and feet blackish, the former rather short. Young distinguishable from adults by having some dark bars on the feathers.

Type.

Coracina, Vieill. Analyse, p. 37 (1816)	<i>C. papuensis.</i>
Graucalus, Cuv. Regne An. i. p. 341 (1817)	<i>C. papuensis.</i>
Ceblepyris, Cuv. t.c. p. 348	<i>C. cinerea.</i>
Ptiladela, Hombr. and Jacq. Voy. Pôle S. Zool. iii. p. 67, (1853)	<i>C. boyeri.</i>
Cyanograucalus, Hartl. J. f. O. 1861, p. 170	<i>C. azurea.</i>

The genus ranges over the tropical portion of the Eastern Hemisphere from West Africa eastward to New Guinea, Australia and Tasmania. It comprises over twenty species, of which six are confined to Africa, two to Madagascar and two to Great Comoro Island.

KEY TO THE SPECIES.

a. Hind neck darker than the mantle.

a¹. Breast grey.

a². Smaller, wing less than 4.5 inches; head and neck more dusky grey *cinerea.*

b². Larger; head and neck blacker *major.*

b¹. Breast not grey.

c². Breast pale yellow *sulphurea.*

d². Breast white *cucullata.*

b. Crown, hind neck and back uniform grey or blue.

c¹. Breast and throat white. *pectoralis.*

d¹. Throat grey, breast white *graueri.*

*e*¹. Breast like the back grey or blue.

*e*². With pale ends to outer tail-feathers *preussi*.

*f*². No pale ends to tail-feathers.

*a*³. General plumage grey.

*a*⁴. Larger; tail about 4·7 *cæsia*.

*b*⁴. Smaller; tail about 3·7 *pura*.

*b*³. General plumage blue *azurea*.

Coracina cinerea.

Muscicapa cinerea, P. L. S. Müll. S. N. Suppl. p. 171 (1776) *Madagascar*.

Campephaga cinerea, Milne Edw. and Grand. Hist. Madag. Ois. i. p. 393, pls. 156a, figs. 2, 304, fig. 4 *egg* (1885).

Graucalus cinereus, Sharpe, Cat. B. M. iv. p. 28 (1879); Sibree, Ibis, 1891, pp. 423, 437; Shelley, B. Afr. i. No. 679 (1896).

Muscicapa kinki, Bodd. Tabl. Pl. Enl. p. 31 (1783).

Muscicapa cana, Gm. S. N. i. p. 940 (1788).

Ceblepyris grisea, Less. Traité, p. 369 (1831).

Ceblepyris madagascariensis, Verr. Cat. Coll. Rivoli, p. 5 (1846).

Subspecies a. Coracina major.

Ceblepyris major, Sharpe, P. Z. S. 1870, p. 389 *Ankavandre*.

Campephaga cinerea, Milne Edw. and Grand. Hist. Mad. Ois. Atlas, ii. pl. 163.

Adults. Head and neck dusky grey shading almost into black on the ear-coverts, sides and back of the neck; remainder of upper parts lead-grey, with the greater portion of the quills blackish, their inner edges white like the under wing-coverts; tail with the centre feathers grey and the remainder blackish, with broad grey ends to the two outer pairs, breast and under tail-coverts pale ash-grey. "Iris dark brown; bill and feet black" (Grandidier). Total length 8 inches, culmen 0·7, wing 3·8 to 4·4, tail 3·7, tarsus 0·8. N. Madagascar.

Young. Differs in having the feathers of the hinder crown and back of neck edged with white; greater coverts and inner secondaries also edged with white; under wing-coverts and inner edges of quills pure white; throat grey; remainder of under parts white, mottled on the chest with a few brown shaft-marks inclining to rounded spots; flanks and under tail-coverts with obscure dusky concentric bars.

Type of C. major. Differs in being larger and in having the crown dusky grey and the remainder of the head and neck black; under wing-coverts and pale inner edges of the quills slightly greyer. Total length 9·5 inches, culmen 0·7, wing 4·5, tail 4·0, tarsus 0·85. Ankavandre (Crossley). Two similar birds, male and female, collected by the Rev. W. Deans Cowan, at Ankafana, have the wings 4·5 inches in length.

The Madagascar Grey Cuckoo-Shrikes are confined to that island.

They are divisible into two subspecies. The typical *C. cinerea*, Müll. is a slightly smaller bird, with the throat and front of the head dusky grey, and is confined to the northern half of the island, while the larger southern race, *C. major*, may be most readily distinguished by the entire neck, sides of head and the forehead being jet black.

According to Grandidier, these birds are always met with in small bands of eight or ten individuals wherever there are large trees, among the upper branches of which they seek their insect food. Their eggs are a rosy white mottled and finely spotted with red, mostly towards the thicker end, and measure 1.1×0.8 . There is a clutch of five in the British Museum, presented by the Rev. W. Deans Cowan, from Betsileo.

The Rev. J. Sibree informs us that these Cuckoo-Shrikes are called by the North Sakalava tribes "Vorontaniomby," by the North Betsimisarakas "Angave," and on the south-east coast "Androbaki." Of these only the latter name would refer to *C. major*.

In the British Museum *C. cinerea* is represented by eight adult specimens and one young bird from Mr. Pollen's expedition. Of *C. major* there are the following specimens: ♂, Antongil Bay (Verreaux); ♂, ♀, ♀, Ankafana Forest (Cowan), also the type and five other specimens, collected by Crossley. If we draw a line from Manambulo on the east coast to Antongil Bay it would roughly indicate the boundary of the range of these two forms: both have been obtained by Crossley during his travels in Madagascar.

Coracina sulphurea.

Graucalus sulphureus, Milne Edw. and Oust. C. R. ci. p. 221 (1885)
Great Comoro; iid. Ann. Sc. Nat. Zool. 1887, p. 228; iid. N. Arch.
 Mus. H. N. Paris (2), x. p. 260, pl. 7, fig. 1 (1888); Sharpe, Handl.
 iii. p. 291 (1901).

Similar to *C. cinerea*, from which it differs in the head and neck being dusky grey, only slightly darker than the remainder of the upper parts and like them tinged with sulphur yellow; greater wing-coverts and secondaries with yellowish white margins; crop, breast and under tail-coverts and the pale ends to the tail-feathers sulphur yellow. Total length 8·7 inches, culmen 0·65, wing 4·1, tail 3·65, tarsus 0·95. Great Comoro Island (Humblot).

A second specimen has been described as intermediate between the type of this species and *C. cucullata*, having the head and neck blacker and the under parts paler yellow.

The Sulphur-breasted Cuckoo-Shrike is a native of Great Comoro Island.

The species was discovered by Monsieur Humblot, who obtained several specimens on the island. It appears to me probable that these two specimens, above described, are adult male and female, as they have no dark bars on the plumage, which is the sign of immaturity in members of this genus.

Coracina cucullata.

Graucalus cucullatus, Milne Edw. and Oust. C. R. ci. p. 221 (1885)
Great Comoro Isl.; Shelley, B. Afr. i. No. 680 (1896); Sharpe
 Handl. iii. p. 291 (1901).

Graucalus (*Ceblepyris*) *cucullatus*, Milne Edw. and Oust. Ann. Sc. Nat.
 Zool. 1887, p. 227; iid. N. Arch. Mus. H. N. Paris (2), x. p. 258,
 pl. 7, fig. 2 (1888).

Adults. Very similar to *C. cinerea major*, from which it differs in having the breast, under tail-coverts, under wing-coverts and inner margins of the quills pure white, the dark grey thighs appearing in strong contrast. Total length 8·5 inches, culmen 0·75, wing 3·75 and 3·95, tail 3·8, tarsus 0·85. Great Comoro Island, ♂, and ♀ (Humblot).

The Comoro White-breasted Cuckoo-Shrike is confined to the island of Great Comoro.

This Cuckoo-Shrike, like *C. sulphurea*, was discovered by Monsieur Humblot, and is represented in the British Museum by two of his specimens. It is a good intermediate form between the Madagascar *C. cinerea major* and *C. pectoralis* of the African continent, resembling the former in the deep black head and neck, and the latter in the white breast and under tail-coverts; it differs from them both in the dark colour of the thighs.

Coracina pectoralis.

Graucalus pectoralis, Jard. and Selby, Ill. Orn. ii. pl. 57 (1828) *Sierra Leone*; Sharpe, Cat. B.M. iv. p. 29 (1879); Shelley, B. Afr. i. No. 681 (1896); Stark and Selater, Faun. S. Afr. B. ii. p. 274 (1901); Butler, Ibis, 1908, p. 225, 1909, p. 80 *Bahr el Ghazal*.

Coracina pectoralis, Reichen. Vög. Afr. ii. p. 515 (1903); Neum. J. f. O. 1905, p. 213 *N.E. Africa*; Neave, Ibis, 1910, p. 131, *Katanga*; Reichen. Mitt. Zool. Mus. Berl. v. p. 221 (1911) *Cameroon*.

Picnonotus niveoventer, Less. Rev. Zool. 1840, p. 226.

Cebblepyris cinerascens, Bp. Consp. i. p. 353 (1850) *Guinea*.

Graucalus frenatus, Heugl. J. f. O. 1864, p. 255 *Djur and Bongo*.

Campephaga anderssoni, Sharpe, P. Z. S. 1870, p. 69, pl. 4 *Ovampoland*.

Adults. Upper parts, from the bill to the tail, pearl grey; quills black with grey outer edges widening out towards the inner secondaries, which have the entire outer webs grey; tail blackish, with the centre pair of feathers grey, the remaining feathers showing white terminal margins, broadest on the outer pair where the pale colouring extends down the outer webs: head mostly grey with a variable amount of black on the sides of the head between the eye and the bill; chin and throat still more variable, being black in an Abyssinian specimen, and pure white with a grey collar in two specimens from Mamboio and Mpimbi, in others they are uniform dusky grey, or paler grey fading into white towards the chin. "Iris brown; bill black; feet darkish in the males, black in the females" (Stark). Total length 9.5 inches, culmen 0.85, wing 5.6, tail 4.5, tarsus 0.85. *Gambia* (Maloney).

Adult female. Like the male; wing 5.9. Salisbury (Marshall).

The Pectoral Cuckoo-Shrike ranges from Senegambia and Abyssinia southward over Tropical Africa.

This is the most widely spread species of the family and

is apparently evenly distributed without being very common anywhere. Many years ago Sir A. Maloney gave me a specimen, now in the British Museum, from the Gambia River, which is the most northern locality known for this Cuckoo-Shrike in West Africa. The type of the species was received by the late Sir W. Jardine from Sierra Leone, and the type of *C. cinerascens* is a specimen from the Guinea Coast. Mr. Boyd Alexander, who procured specimens at Gambaga and Krachi in the Gold Coast Colony, describes the immature plumage (Ibis, 1902, p. 309). Between Togoland and Benguela I find it recorded only from Camaroon (Carnap and Riegenbach), Gaboon (Verreaux) and Milandje (Meehows). Bohndorff, during his Congo Expedition, procured examples at Stanley Falls, and also at Dem Suleiman and Sassa on both sides of the watershed separating the Congo from the Gazelle River.

In Benguela Anchieta collected specimens at Caconda and Quibella, and found it known to the natives as the "Epio" at Galanga, and the "Pio" at Quindumbo. It has also been procured in the upper Cunene district, by Van der Kellen, on the Kasinga River. Andersson obtained it in Ovampoland, and the type of *C. anderssoni* at Ovaquenyama, which latter specimen is in the British Museum. The species has not been recorded from further south in western Africa.

On the eastern side of the continent these Cuckoo-Shrikes range from the Tropic of Capricorn northward into Abyssinia, and the Bahr el Ghazal, where Butler found them not uncommon in thick forest. They are represented in the British Museum from the Lehtaba River in the eastern Transvaal, Mashonaland, Zambesi, Nyasaland, Mamboio, Uganda, Tobbo and Abyssinia. Mr. Walter Ayres shot two of these birds at Rovi-rand, near the Lehtaba River, an

affluent of the Lower Limpopo. The first was catching insects in the upper branches of a high mimosa tree, and from its flight he mistook it for a Cuckoo. Its crop contained caterpillars and the shell of a green locust. The other specimen he saw at the same spot a few days later, and observes that he never met with the species elsewhere. Mr. Swynnerton finds it by no means uncommon in Gazaland and states that it is occasionally seen on the outskirts of Chirinda. From Mashonaland Mr. Guy Marshall sent me a pair of these birds, for the British Museum, with the following remarks: "Not a very common species, solitary and retiring in its habits. When startled its flight is fairly swift and rather swooping; but when hopping among the branches of a tree or descending to the ground after insects it falls as softly as a snowflake. These birds principally frequent the larger trees in the open forests and I have observed them not only near Salisbury but also at the Hanyani and Umfuli Rivers. They are very quiet birds and I have only occasionally heard them give utterance to a long, soft but high-pitched whistle. The sexes are alike, and their food consists chiefly of grasshoppers and coleoptera." At the middle course of the Zambesi it is, according to M. Foa, known to the natives as the "Kouméniamenia." From between the Zambesi and the Equator these Cuckoo-Shrikes have been recorded from many different places in Nyasaland and Uganda, and to the north of the Line eastward from the Nile from some dozen localities. Heuglin obtained the type of his *Graucalus frenatus* in the country between Djur and Bongo, where it is abundant in the forests and known to the natives as the "Avuanda." It is also frequently found in the lowlands of Abyssinia, and Heuglin remarks that it mostly frequents the thick foliaged trees, but will at times alight on the backs of buffaloes and elephants, and that the male's

song is a soft *duid-duid*, which is answered back by a prolonged *schì* from the female, and that the song, though not so loud, resembles that of *Laniarius lugubris*.

Coracina graueri.

Coracina graueri, Neumann, Bull. Bt. Orn. Cl. xxiii. p. 11 (1908), *Lake Albert Edward District*.

Adult. Above very dark slate with bluish tinge becoming sooty on the wings and tail; below, the throat dark ashy grey, distinctly marked off from the white of the rest of the under parts, including the under wing- and tail-coverts; a slight greyish wash on the flanks; bill smaller and more slender than that of *C. pectoralis*. Iris and bill black, feet grey. Length about 9·0, wing 4·45, tail 4·20, culmen 0·50, tarsus 0·85. "Forest, 90 km. west of Lake Albert Edward," February 14, 1903, ♀ (Grauer).

The type is marked ♀ by the collector, a second example also marked ♀ has a smaller wing, 4·20; possibly the larger bird is a male and wrongly sexed.

Only known from the two specimens collected by Mr. Grauer, now in the Tring Museum.

Coracina cæsia.

Ceblepyris cæsia, Licht. Verz. Doubl. p. 51 (1823) *Kaffraria*.

Graucalus cæsius, Sharpe, Cat. B. M. iv. p. 26 (1879); Shelley, B. Afr. i. No. 683 (1896); Stark and Selater, Faun. S. Afr. B. ii. p. 275 (1901); Shortridge, Ibis, 1904, p. 190 *Pondoland*; Taylor, Journ. S. Afr. Orn. Union 1906 p. 41, *Transvaal*; id. *ibid*, 1909 p. 85.

Coracina cæsia, Reichen. Vög. Afr. ii. p. 514 (1903).

Ceblepyris levaillantii, Temm. Pl. Col. iii. livr. 42, Genre *Ceblepyris* Esp. 2 (1825).

L'Echenilleur Gris, Levaill. Ois. d'Afr. iv. p. 47, pls. 162, 163 (1805).

Adult male.—Plumage leaden grey, slightly whiter round the eye and towards the forehead, the latter narrowly margined in front with dusky black; a black loreal patch; quills, greater wing-coverts, and the tail, with the exception of the centre feathers, black. Iris dark brown; bill black; feet dark grey. Total length 9·7 inches, culmen 0·75, wing 5·1, tail 4·7, tarsus 0·9. Zululand (Gordge).

Adult female. Distinguished from the male in having no black on the head, the feathers in front of the eye being grey. Wing 5.0. Pinetown ♀ 26.8.75 (T. L. Ayres).

Immature. Similar to the female, but with some narrow white edges to the quills and outer greater coverts; under tail-coverts, with a black sub-marginal bar on each feather. Wing 5.0. Durban ♀ 31.3.74 (Shelley).

The Grey Cuckoo-Shrike was first discovered by Levillant, who found it common in the forests of the "Outeniqua," on the banks of the Sunday and Swartkops Rivers of Cape Colony. Westward of this it extends as far as Grootvaders Bosch in the Swellendam division, where it was met with by Taylor, eastwards through Pondoland and Natal to Zululand, and, according to Taylor again, as far as the Letaba Valley, in the Zoutspansberg district of the Transvaal. North of this point I have not heard of its occurrence either in Rhodesia or British Central Africa.

There are examples in the British Museum from George (Atmore), Knysna (Andersson), and King William's Town (Trevelyan) in Cape Colony; from Durban (Ayres), and Newcastle (Reid) in Natal; and from Zululand.

This bird is confined to forest districts, and keeps much to thick bushes and to the tops of tall trees, so that it escapes observation and is not frequently met with. It feeds chiefly on caterpillars. Levillant states that he examined 160 stomachs and that they contained nothing else, but Shortridge found beetles in one specimen. Its voice is not loud, its cry being a harsh scream. It is sometimes seen alone, though more often in small parties of five or six individuals.

The nest and eggs do not appear to be known.

Coracina pura.

Graucalus purus, Sharpe, Ibis, 1891, p. 121, 1892, p. 299 *Mount Elgon*; Shelley, B. Afr. i. No. 684 (1896); Neumann, J. f. O. 1900, p. 261; Jackson, Ibis, 1906, p. 538.

Coracina pura, Reichen. Vög. Afr. ii. p. 515 (1903), Erlanger, J. f. O. 1905, p. 688 *S. Abyssinia*; Reichen. Deutsch. Zentr.-Afr. Exped. iii. p. 308 (1910).

Coracina cæsia pura, Neum. J. f. O. 1905, p. 213 *N. E. Africa*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 111 (1910).

Graucalus cæsius, Ogilvie-Grant, Ibis, 1900, p. 171 *Abyssinia*; id. Trans. Zool. Soc. xix. p. 389 (1910) *Ruwenzori*.

Types, male and female. Nearly similar to *C. cæsia*, but smaller. Total length 9 and 9.5 inches, culmen 0.7 and 0.75, wing 4.8 and 4.7, tail 3.5 and 3.7, tarsus 0.85.

Immature. Similar to that of *C. cæsia*, already described, but a few of the feathers of the breast have broadish black bars. Nandi 5. 7. 98 (Jackson).

Jackson's Cuckoo-Shrike ranges over Central and Eastern Africa from the Nyasa-Tanganyika plateau to Abyssinia.

In German East Africa the species has been recorded from as far south as Bulonga (Fülleborn), situated in the Livingstone Mountains, to the north of Lake Nyasa and in the Morogoro (Stuhlmann), a country between Ugogo and Zanzibar. It is represented in the British Museum, from Mount Elgon, where Mr. Jackson discovered the type in thick forest; also from the Eldoma ravine and Nandi (Jackson), Mount Kenia (Mackinder), Nairobi (Delamere), Somaliland (Atkinson and Delamere), Amadja (Zaphiro), Chelanco (Lovat).

Lord Lovat writes: "Of a shy, skulking habit, this bird might be easily passed over but for its magnificent note. They were plentiful in the Warabili and Kuni forests. I do not think that its range extends very far north or east. Near Addis Abeba, in the thickets at Mangasia, a solitary specimen of the bird was observed." Mr. Woosnam, who obtained this bird on the slopes of Ruwenzori, describes its cry as a long-drawn-out feeble squeak resembling that of a mouse. Mr. Oscar Neumann, who met with it in the Kikuyu, Malo and Kaffa countries, records it as frequenting the thickest and darkest forests, at elevations of from 7,000 to 9,000 feet;

it was evidently breeding in February and March. A little further eastward Erlanger procured four specimens during his journey from Gara Mulata to Derhu. In Shoa both Antinori and Ragazzi found the species frequenting the forest. Sjöstedt, who obtained one example in the rain-forest on the slopes of Kilimanjaro, found beetles and caterpillars in the stomach.

Coracina preussi.

Graucalus preussi, Reichen. J. f. O. 1892, p. 183 *Camaroon*; Shelley, B. Afr. i. No. 682 (1896); Alexander, Ibis, 1903, p. 360 *Fernando Po*.

Coracina preussi, Reichen. Vög. Afr. ii. p. 515 (1903).

Type. General plumage grey, inclining to white on the front of the crown and on the eyebrows; a streak round the forehead and the lores black; throat slaty black; quills and tail-feathers black, edged with grey, and the outer tail-feathers tipped with grey. Iris brown; bill and feet black. Total length 9·8 inches, culmen 0·7, wing 4·5, tail 4·15, tarsus 0·9.

Female. Differs in having the forehead, lores and throat uniform grey like the remainder of the under parts.

Preuss's Cuckoo-Shrike inhabits Camaroon.

The types, consisting of a male and female, were discovered by Dr. Preuss in September and October at Buea at an elevation of 3,000 feet; he also obtained an immature specimen of this apparently very local species on Mount Victoria in May. The only other mention I find of this Cuckoo-Shrike is that of Boyd Alexander who obtained a hen bird at 500 feet on Mount St. Isabel in Fernando Po. He gives a short note: "Total length (measured in flesh) 8·7 inches, culmen 0·9, wing 4·53, tail 4·3, tarsus 0·96. Iris black; legs and feet brownish black." This example, which appears to be indistinguishable from a female of *C. vura*, is now in the British Museum.

Coracina azurea (Pl. 52, fig. 2).

Graucalus azureus, Cassin, Proc. Philad. Acad. 1851 p. 348 *St. Paul's River, Liberia*; Sharpe, Cat. B. M. iv. p. 27 (1879); Oustalet, Nat. 1893, p. 126; Sjöstedt, Sven. Vet. Akad. Handl. xxvii. art. i. p. 76 (1895); Shelley B. Afr. i. No. 685 (1896); Alexander, Ibis, 1902, p. 309 *Gold Coast Colony*; Ogilvie Grant, Trans. Zool. Soc. xix. p. 390 (1910) *Ituri forest*.

Coracina azurea, Reichen. Vög. Afr. ii. p. 516 (1903); Sharpe, Ibis, 1907, p. 457 *Cameroon*; Reichen. Mitt. Zool. Mus. Berl. v. 1910, p. 82 *Rio Benito*.

Campophaga cœrulea, Oustalet, Ann. Sci. Nat. (6) xvii. art. 8, p. 1 (1884) *Mayumba, Congo*.

Adult male. Forehead, sides of head in front of the eyes and the chin black; remainder of head and neck bright blue, gradually fading into a slightly paler and more verditer blue on the body, upper and under tail-coverts, scapulars, lesser wing-coverts, and the whole of the exposed portion of the secondaries when the wing is closed; greater wing-coverts, remainder of quills and the tail-feathers black, with narrow blue edges; under surface of quills uniform dusky black; under wing-coverts blue like the body. Iris red; bill and feet black. Total length 8 inches, culmen 0·7, wing 4·35, tail 3·8, tarsus 0·8. Gaboon (Brit. Mus.).

Adult female. Differs only in the black of the head being confined to a band from the eyes round the forehead, while the head and neck are of the same shade of blue as the body. Wing 4·35. Fantee (Ussher).

Immature. Similar to the female above described, but differs in having some white terminal margins to the quills, a few of which are broad with concentric black bars. Gaboon (Du Chaillu).

The Blue Cuckoo-Shrike ranges from Liberia to the Congo.

The type was discovered by Dr. McDowell at St. Paul's River in Liberia. Otherwise the species has not been recorded from further west than the Gold Coast, in which Colony specimens have been collected at Enimill (Blissett) and in Denkeria (Aubinn). Boyd Alexander writes: "Prahsu and Fumsa. Confined to the forest region, where it is by no means common." On following the coast we next find it recorded from Cameroon, where specimens have been collected at Efulen (Bates), Bipindi (Zenker), Mann's

Well (Knutson), and Ndian. At the last place Mr. Sjöstedt saw them on two occasions in the high trees. Their note is a shrill repeated cry, and their food consists of grasshoppers and other insects.

Du Chaillu procured the species at the Camma River, in Gaboon, and Lucan and Petit in the Loango district of the Lower Congo at Chissambo, Majumba and Ungomongo. The north-eastern limit for this Cuckoo-Shrike is the Ubangi River, one of the northern tributaries of the Congo, where it has been met with by Mr. Dybowski, while a single example was recently procured by the Ruwenzori expedition on October 17 in the Ituri forest of the Congo Free State, at an elevation of 3,000 ft.

Like all the African members of this genus, nothing is yet known regarding its nest and eggs, which I presume are hidden among the upper leafy boughs of the tall forest trees, and the nests are probably very similar to those of *Campephaga nigra* which have been described.

Genus IV. OXYNOTUS.

Very similar in general structure to *Coracina*, but the sharp ends to the feathers of the back less strongly pronounced. They are smaller birds, and the sexes differ in the upper parts being gray in the males and brown in the females. Primaries, 4th longest, 1st quite half the length of 4th.

Type.

Oxynotus, Swains. Faun. Bor. Amer. B. p. 483 (1831). *O. rufiventer*.
 Schetba, Less. Traité, p. 374 (1831) *O. rufiventer*.

The genus is represented in the Madagascar subregion by two species, which are confined to the islands of Réunion and Mauritius.

KEY TO THE SPECIES.

- a. Upper parts grey males.
- a¹. Larger; wing 4.2; throat pure white *rufiventer* ♂.
- b¹. Smaller; wing 3.8; throat greyish *newtoni* ♂.
- b. Upper parts brown.
- c¹. Breast rufous *rufiventer* ♀
- d¹. Breast white, barred with dusky black *newtoni* ♀.

Oxynotus rufiventer.

- Oxynotus rufiventer*, Swains. Faun. Bor. Amer. B. p. 483 (1831).
Lalage rufiventer, Sharpe, Cat. B. M. iv. p. 101 (1879); Shelley, B. Afr. i. No. 686 (1896); Manders, Proc. Zool. Soc. 1911, p. 701.
Lanius ferrugineus (non Gm.) Quoy and Gaimard, Voy. Uranie, p. 96, pl. 17 ♀ (1824) *Mauritius*.
Campephaga capensis, Blyth, Cat. B. Mus. A. S. Beng. p. 191 (1849).
Oxynotus typicus, Hartl. J. f. O. 1865, p. 160 *Mauritius*; Pollen, Ibis, 1866, p. 278, pl. 7.

Adult male. Upper parts slaty-grey, slightly paler on the lower back, and washed with white on the sides of the forehead and crown; lores and ear-coverts more dusky; wings dusky black with greyer edges to the wing-coverts, and with rather narrow incomplete edges to the quills; tail dusky black, with clear white ends, broadest on the outer feathers, the centre feathers washed at the sides with grey; under parts white, shaded with grey on the sides of the throat and chest, and more strongly so on the thighs and flanks; under wing-coverts and nearly the whole basal half of the inner webs of the quills white. Iris hazel; bill black; feet slaty-grey with the soles apparently yellow. Total length 9 inches, culmen 0.75, wing 4.2, tail 4.0, tarsus 0.95. *Mauritius* (Bewsher).

Adult female. Upper parts deep rufous brown of a paler and brighter rufous on the lower back, upper tail-coverts and edges of the wing-feathers; front and sides of forehead and the lores hoary white, forming an indistinct eyebrow which becomes rufous-buff from the eye backwards; on the sides of the head there is a dusky patch in front of the eye and the ear-coverts are dark brown; wings dark brown with paler edges to the feathers; under wing-coverts white mottled with rufous; inner webs of quills, with the basal portion white slightly tinted with rufous; tail brownish black, with rufous-white ends, broadest on the outer feathers, while the inner pair are washed with rufous; chin and cheeks white; a broad band under the eye and the ear-coverts white, mottled with black; throat, breast, and under tail-coverts rich rufous. Bill dusky horn colour, paler on the lower mandible; feet dark brown, with their soles apparently yellow. Total length 9.5 inches, culmen 0.8, wing 4.3, tail 4.0, tarsus 1.1. *Mauritius* (Bewsher).

Immature. Differs from the last in being much paler; all the feathers of the upper parts with their terminal margins rufous buff; the pale ends of the tail-feathers whiter: the white of the chin shading into rufous buff on the remainder of the under parts, which are streaked with brown.

This bird was first made known by MM. Quoy and Gaimard, who published in the account of the voyage of the "Uranie"

and "Physicienne" a figure and description of a female example from Mauritius to which island the species is confined. Unfortunately they confused this bird with the Boubou Shrike (*Laniarius ferrugineus*) of the Cape, and the earliest available name is that of Swainson.

Most of our knowledge of this species is derived from some notes of Sir Edward Newton communicated to M. E. Pollen, and published in the *Ibis* for 1866. He states as follows:—

"The *Oxynotus* of Mauritius or 'Cuisinier' as it is, for what reason I do not know, called, begins to build towards the end of October or beginning of November. Two of the three nests that I have found were placed in small trees not more than 20 ft. high, and of a sort of mop-like growth, the nest being nearly in the centre of the 'mop' and almost out of sight from below, on account of the small thickly growing leaves. One tree was a 'Bois-balai, *Erythroxylum hypericifolium*), the other is 'Bois de pomme' (*Lyzygium glomeratum*). One of the nests, which is now before me and contained two eggs when I took it, is flat, shallow and very small for the size of the bird (whose head and tail projected considerably on either side), being 4.5 inches in external and 3.0 inches in internal diameter. The height of its walls is nowhere more than 2.5 inches. It is composed of long fern-roots and tendrils of some plant, studded on the outside with a common white and black lichen, and well secured by spider's web woven over its outer surface. The eggs measure about 1.07 inch in length, by about 0.74 inch in breadth. They are of a very pale sea-green, thickly marked with ash-coloured spots of a middle size, and blotched, especially about the larger circumference, at the obtuse end of the egg, with patches of olive-brown; these latter markings, though of irregular shape and size, having a general longitudinal tendency.

"The 'Cuisinier' is found, I believe, in every part of the

island where the original forest is left ; but I fear that before many years, when its haunts have disappeared, it also will vanish. It is a very silent bird, and not often heard except in the breeding season, when it has a cry which reminds me of that of the Nuthatch (*Sitta cæsia*). Its other note is harsh and, though not so loud, is not unlike that of a Jay (*Garrulus glandarius*)."

Colonel Manders states that this bird is essentially insectivorous and that he has himself seen them catching mantis, and has found beetles and moth-wings in their stomachs. He was told that the bird is now very rare and verging on extinction.

There are five examples in the British Museum collection, three males and two females. One is from Edward Newton's collection, the others were collected by Bewsher.

Oxynotus newtoni.

Oxynotus newtoni, Pollen, Ibis, 1866, p. 278, pl. 8 *Réunion* ; Schlegel and Pollen, Faun. Madagas. p. 83 (1868).

Lalage newtoni, Sharpe, Cat. B. M., iv. p. 102 (1879) ; Shelley, B. Afr. i. No. 687 (1896).

Adult male. Resembling *O. rufiventer* but rather smaller ; above ashy grey, clearer and more plumbeous than in *O. rufiventer*, below paler greyish ashy, a little paler on the centre of the abdomen and white on the under tail-coverts but the throat not so white as in *O. rufiventer*. In other respects it resembles *O. rufiventer*. Iris brown, bill and feet bluish (Pollen). Total length 7·5, culmen 0·60, wing 3·80, tail 3·4, tarsus 0·90.

Adult female. Very different from the male or from the female of *O. rufiventer* ; above rich sepia brown, rather darker and more ashy on the head, slightly paler on the rump ; least wing-coverts and inner secondaries like the back, other coverts and the quills dusky brown, the latter edged with dirty white ; tail as in the male but the centre feathers more tinged with brown ; below, including the sides of the face and neck, dull white marked with numerous narrow dull black transverse bars ; under tail-coverts white and unmarked. Soft parts as in the male. Wing 3·9, tail 3·5.

Young. A bird in the British Museum, obviously not quite adult, shows traces of black bars on white over the back, and a good deal more white on the secondaries.

Newton's Cuckoo Shrike is confined to the Island of Réunion or Bourbon, where it inhabits chiefly the mountain forests at elevations from 2,500 ft. to 4,000 ft.; it is solitary and only met with in thick bush, where it can sometimes be seen hopping and jumping from branch to branch. It has a loud cry sounding like "Ti-tuit" which is the name by which it is generally known among the creoles, and it feeds chiefly on coleoptera and their larva.

According to Pollen, to whom we are indebted for all our information in regard to this species, it renders great service in destroying the insects which do so much harm to the palm trees (which furnish the colonists with the excellent *Choux-palmiste*) and to other trees of value in the island.

There are three males and four females in the British Museum, all collected by Messrs. Pollen and Van Dam on Réunion.

Family IV. LANIIDÆ.

Bill black, brown, white, or pale yellow, with a strong hook and a well-developed notch near the end of the upper mandible. Wing fairly powerful. Tail of 12 feathers. Tarsi strong, with the sides and back bilaminated, and like the feet and claws, generally blackish. The young generally differ considerably from the adults in their plumage being barred, the narrower bars being always blackish and darker than the remainder of the feather. On this latter character I have separated as a distinct family the *Vangidæ*, in which the bars, when present on the immature plumage, are pale and generally white, as in the *Dicruridæ*.

The *Laniidæ* range over Europe, Asia, Africa, and North America, and are replaced in the Madagascar subregion by the *Vangidæ* and a nearly allied genus, *Oxynotus*.

KEY TO THE SUBFAMILIES.

- a. Feathers of lower back normal; nostrils at least partly concealed by the frontal bristles *Laniinæ*.
- b. Feathers of lower back soft and fluffy; nostrils more free from the frontal bristles *Laniariinæ*.

Subfamily I. LANIINÆ.

Bill compressed at the sides, and deeper than broad at the nostrils, which are covered by the frontal feathers or bristles; rictal bristles well developed. Lower back with the feathers normal. Tail considerably more than half the length of the wing.

The range is the same as that of the family, the grey-backed members extending over Europe, Asia, Africa, and North America. I have divided this subfamily into six genera, of which three are confined to Tropical and South Africa, with the exception of *Fiscus nubicus*, which ranges northward into the Eastern Mediterranean district.

KEY TO THE GENERA.

- a.* The sexes may be generally easily distinguished by the colouring of the flanks.
 - a*¹. Feathers of crown, neck, and flanks lanceolate; tail very strongly graduated, and more than twice the length of the wing *Urolestes*.
 - b*¹. Feathers of crown, neck, and flanks not lanceolate; tail shorter.
 - a*². Tail-feathers narrow and strongly graduated (graduation more than half the length of the wing); wings and tail brown, with some rufous bars; flanks with a large chestnut patch, at least in the females *Corvinella*.
 - b*². Tail-feathers comparatively broader and less strongly graduated; greater portion of quills and tail black; the females generally distinguished by the rufous patch on the flanks *Fiscus*.
- b.* Plumage of the sexes never distinguishable by the colouring of the flanks only; the black on the hinder half of the head never extends down the whole length of the neck; crown never black.
 - c*¹. No portion of upper parts rufous in adults; quills black, with some white bases; crown, hind neck, and upper back mostly grey *Lanius*.
 - d*¹. Adults with some rufous on the upper parts.
 - c*². Tail not rufous.
 - a*³. Scapulars white; a bright rufous patch on the crown and hind-neck *Phoneus*.
 - b*³. Scapulars rufous *Enneoctonus*.
 - d*². Tail rufous *Otomela*.

Genus I. UROLESTES.

Bill stout, but short, the culmen curved, with a strong notch near the tip; nostril oval without membrane, overhung but not generally concealed by the projecting frontal feathers; gape with strong rictal bristles; feathers of the crown and neck lanceolate; wings somewhat rounded, the first primary more than half the second, the fourth and fifth the longest; tail much graduated and more than twice the length of the wing; feathers of the flanks elongated and pointed, entirely black in the males, and black and white in the females; sexes otherwise similar in plumage, which is entirely black and white.

Type.

Basanistes, Licht. (non Burm., Crust. 1836), Verz.

Vög. and Saugeth. Kaffernl. p. 12 (1842) . . . *U. melanoleucus*.

Urolestes, Cab. Mus. Hein. i. p. 75 (1850) . . . : *U. melanoleucus*.

The genus is confined to Africa, south of the Equator, and contains a single species.

Urolestes melanoleucus.

Lanius melanoleucus, Jard. and Selby, Ill. Orn. pt. viii. pl. 115 (1831)
Orange River.

Urolestes melanoleucus, Gadow, Cat. B. M. viii. p. 229 (1883); Symonds, Ibis, 1887, p. 331 *Kroonstad*; Shelley, B. Afr. i. No. 690 (1896); Stark and Selater, Birds S. Afr., ii. p. 3 (1901); Reichen. Vög. Afr. ii. p. 627 (1903); Whitehead, Ibis, 1903, p. 226 *Orange R.*; Swynnerton, Ibis, 1907, p. 45 *Gazaland*; Chubb, J. S. A. Orn. Union v. p. 68 (1909) *Matabeleland*; W. Selater, Ibis, 1911, p. 282.

Lanius melanoleucos melanoleucos, Schiebel, J. f. O. 1906, p. 182.

Lanius melanurus, Licht. Verz. Kaffernl., p. 12 (1842).

Basanistes cissoides, Licht. (non Vieill.) l. c.

Urolestes melanoleucus damarensis, Neum. J. f. O. 1900, p. 262 *Reheboth (Damaraland)* and *Udschi (Kalahari)*.

Urolestes æquatorialis, Reichen. J. f. O. 1887, p. 65 *Gaza Mts. German East Africa*; id. Vög. Afr. ii. p. 628 (1903).

Lanius melanoleucos æquatorialis, Schiebel, J. f. O. 1906, p. 182.

Adult male. Slightly crested; feathers of head and neck lanceolate; general plumage glossy black, usually with a brown shade on the chest as well as on the throat; lower back greyish white passing into pure white towards the sides of the body; scapulars, basal portion of the primaries and the tips of all the quills, white; tail-feathers sometimes tipped with white. Iris brown; bill and feet black. Total length 18 inches, culmen 0·8, wing 5·25, tail 13·2, tarsus 1·3.

Adult female. Differs from the male in having a portion of the long, lanceolate feathers of the flanks white. Wing 5.2, tail 11.5. Transvaal, ♀ 7. 7. 73 (Buckley).

Young. General colour above blackish-brown, most of the feathers edged with clearer brown, especially on the wing-coverts; scapulars white, tinged with brown at the tips; quills blackish, their tips and basal halves white; lower back and rump greyish; tail black; sides of face and under surface of body bronzy, the feathers edged with fulvous; a patch of brownish-white on the flanks; the tail not tipped with white.

The Magpie Shrike ranges from eastern Cape Colony northward into Benguella on the west, and to the Equator in East Africa.

Dr. Reichenow divides the species, at the Zambesi, into two, a southern and an east African species, and Mr. Oscar Neumann has proposed to separate the German S.-W. African birds as a subspecies, *U. melanoleucus damarensis*, but I fail to find any characters whatever for distinguishing these races. In several specimens from its southern range, in the British Museum, there is no brown shade on the plumage, and the white tips to the tail-feathers, which easily get worn off, are most strongly marked on one of the specimens from Damara-land, and are visible in others from Natal, the Transvaal and Nyasaland.

The species is abundant in Benguella and Mossamedes and is known to the natives as the "Bitocatoca," according to Anchieta, who collected specimens at Quillengues, Huilla, Gambos and Humbe, while others have been obtained by Kellen in the Upper Cunene district. In German S.-W. Africa, Chapman found it "not uncommon in the lake regions, but a scarce bird in the southern parts of Damaraland. Gregarious; at times very noisy, more especially if a bird of prey is approaching. Of such it entertains no fear, but warns the smaller birds of the enemy. The moment the alarm cry of *U. melanoleucus* is sounded every little fellow

seeks a place of safety." Andersson obtained specimens at Ondonga and Ovanquenyama, but did not meet with the species further south than the central part of Damaraland. Fleck records it from southern Damaraland and the Kalahari, and Mr. Oscar Neumann remarks that two of these specimens have no brown shade on the breast, and proposes the name of *U. melanoleucus damarensis* for them.

Sir Andrew Smith discovered the species at the Orange River, where, according to Lieutenant Whitehead, it is not common, and from Cape Colony it has been mentioned only by Layard, who writes: "We have received several specimens from Colesberg."

The species is apparently very rare in Natal; but from Zululand the Brothers Woodward write (*Ibis*, 1898, p. 226): "We found several pairs of the Magpie-Shrike (*U. melanoleucus*) nesting in the thorn-trees, and secured their eggs—round, pinkish-white, dotted with brown and purple. These birds keep up a loud and rather harsh whistling."

Claude Grant also found this bird in Zululand near Umfolosi station, and at Klein Letaba in the bush-veld of north-eastern Transvaal. He states that it was called Tyuma by the Zulus and Chilauli by the Shangaans, and writes as follows: "I have observed it only singly or in pairs, and it frequents the tops of trees or thorn-bushes, whence it catches its prey, which consists of insects, such as grasshoppers, usually on the ground. It has a strong, somewhat dipping flight, and the call, constantly repeated, is loud and rather harsh, and is best interpreted by the Shangaan native name.

Mr. T. Ayres writes (*Ibis*, 1882, p. 261): "A rather common species throughout the bush-veld from Rustenburg into the Mashona country, where, on October 8, we found it breeding. The nest was placed amongst the outer boughs of a low thorn-tree some eight feet from the ground and was

cup-shaped, roughly constructed externally, principally of thorny twigs, and lined with fibrous roots and dry wiry bits of grass. It contained four somewhat incubated eggs, of a pale creamy brown colour, with a finely speckled zone of rich brown of various shades, from nearly black to pale brown, the rest of the surface more or less dotted all over with brown. They measured $1\frac{1}{8}$ by $\frac{3}{4}$ inch." According to Stark and W. L. Sclater's notes: "The eggs, three or four in number, are usually short ovals, with a glossy surface. The ground colour varies from cream colour to salmon pink, spotted all over, but most thickly in a zone round the big end with small dots, and a few short zigzag markings of rufous-brown, burnt sienna and slate grey." The birds are to be seen hunting through the bushes, among the tops of trees or flying down to capture insects on the ground.

From Gazaland Mr. Swynnerton writes: "Ishindawo name 'Uwhitshoriro.' Of rare occurrence in the high veld proper, but is said to be comparatively common in the Sabi valley and on the lower Buzi. Its tail-feathers are worn by the Kaffirs."

It has not been recorded from the neighbourhood of the Zambesi between Mashonaland and Lake Nyasa, but Sir Alfred Sharpe has procured the species in North Nyasaland and M. Dubois records it as forming part of Storm's collection from Lake Tanganyika, and it is apparently very generally distributed over German East Africa as far north as Kilimanjaro. Böhm observed these birds from January to May usually in parties, often congregating with other birds. They were breeding in February and were escorted by their young in March, and Böhm gives some interesting details regarding their habits (J. f. O. 1883, p. 188). Emin records it from Ugogo and collected specimens in the Unyamwesi country, where Speke met with it at Kazeh and in Bogue in small flocks.

Stuhlmann obtained the species at Ngoma to the west of the Victoria Nyanza. Fischer collected specimens in Great Arusha, where he found insects spitted on thorns by these Shrikes after the manner of our better known Butcher-birds. He procured the type of *U. æquatorialis*, a female, in the Gaza Mountains and other specimens at Soboro, Kagehi and Nassa during his last journey to the shores of the Victoria Nyanza.

There are examples of this species in the British Museum from the Maritzani river near Mafeking (Layard), Lake Ngami (Chapman), Rustenburg (Ayres), Crocodile River and Tati (Oates), Swaziland (Buckley), Umfolosi station in Zululand and Klein Letaba in the Transvaal (Grant), Makalaka country and Zambesi (Bradshaw), and Enkeldoorn, Rhodesia (Clark), Ondonga and Ovaquenyama in northern Damara-land (Andersson), Huilla in Benguella (Anchieta), north of Lake Nyasa (Sharpe) and Uniamwesi in German East Africa (Emin).

Genus II. CORVINELLA.

Bill still shorter and more curved than in *Urolestes*, surrounded by strong bristles; wing somewhat rounded as in *Urolestes*; tail longer than the wing but not twice the length, the feathers narrow and very strongly graduated, the graduation being more than half the length of the wing. General plumage brown, more or less streaked or barred with black; under parts whiter with some rufous on the flanks, at least in the females; tail mottled with rufous.

Type.

Corvinella, Less. Traité, p. 372 (1831) *C. corvina*.

The genus is confined to Tropical Africa and comprises two species. The genus leads into *Fiscus* through *C. souzæ*, in which the rufous of the flanks is confined to the females.

KEY TO THE SPECIES.

- a.* Bill yellow; no pure white on the scapulars *corvina*.
- b.* Bill black; scapulars mostly pure white *souzæ*.

Corvinella corvina.

- Lanius corvinus*, Shaw, Gen. Zool. vii. 2, p. 337 (1809) *ex Levaill.*;
 Schiebel, J. f. O. 1906, pp. 179-181, pl. G. fig. 4.
Corvinella corvina, Gadow, Cat. B. M. viii. p. 231 (1883); Shelley, B. Afr.
 i. No. 691 (1896); Reichen. Vög. Afr. ii. p. 629 (1903); Butler, Ibis
 1908, p. 225, 1909, p. 80 *Bahr el Ghazal*; Reichen. Mittl. Zool.
 Mus. Berl. v. p. 223 (1911) *Cameroon*.
Lanius cissoides, Vieill. Enc. Méth. ii. p. 734 (1822).
Lanius mellivorus, Licht, Verz. Doubl. p. 49 (1823) *ex Levaill.*
Lanius flavirostris, Swains. Classif. B. ii. p. 219 (1837) *Senegal*.
Corvinella corvina nubiae, Filippi, Rev. et Mag. Zool. 1863, p. 290
N. E. Afr.
Corvinella affinis, Heugl. Syst. Uebers. p. 34 (1855) *nom. nud.*; id. N. O.
 Afr. p. 488 (1871) *N. E. Afr.*; Shelley, B. Afr. i. No. 692 (1896).
Corvinella affinis togoensis, Neumann J. f. O. 1900 p. 263 *Togoland*.
Le Grande Piegriche, Levaill. Ois. d'Afr. ii. pl. 78 (1799).

Adult. Upper parts brown, more or less shaded with rufous towards the edges of the feathers and ash on the mantle; feathers of the head, mantle and upper tail-coverts with broad blackish shaft-stripes; feathers of wings and tail with paler edges and a large patch of rufous on the basal half of the primaries; sides of head dark brown, with an imperfect broad buff eyebrow; under parts buff, with black shaft-stripes, almost confined to the lower throat and chest, where often many of the feathers have irregular imperfect brown bars; flanks with a large deep chestnut patch, alike in both sexes. Iris hazel; bill yellow; tarsi and feet slate-colour with a yellowish tinge. Total length 12 inches, culmen 0·8, wing 4·7, tail 7·3, tarsus 1·25. Accra (Shelley).

Young. Differs in having no dark shaft-stripes and the feathers of the lower throat, chest and flanks irregularly barred with brown.

The Yellow-billed Long-tailed Shrike ranges from the northern side of Victoria Nyanza throughout the White Nile district and into Senegambia.

The species is represented in the British Museum, from the Gambia (Quin and Maloney), Sierra Leone (Fraser), Fantee (Ussher), Accra (Shelley), Gambaga (Northcott), Dem Suleiman in the Bahr el Ghazal (Bohndorff), Soudan (Knob-lecker) and Uganda (Jackson). These specimens show that a considerable variation in the bars and stripes on the breast

are not constant characters for any local forms, so, like Dr. Reichenow, I do not admit any subspecies.

In its most northern known range it has been procured by Marche and De Campiègne, near Cape Verde. Fea found it inhabiting the Bissagos Islands. On the Gold Coast I shot three specimens at Quamin-fio, in the scattered clumps of bushes on the plain some ten miles from Accra, and remarked how Shrike-like they were in their habits. Mr. Boyd Alexander met with the species at Gambaga and Kwabia, and writes (Ibis, 1902, p. 309): "This bird frequents bush-country, and may be seen singly or in small parties travelling from one thick-leaved tree to another, uttering the whole time a chorus of loud chirps. Lizards form its principal food. The flight is even and very straight. Its pose, when perched, is like that of a Shrike." He then describes the plumages of the immature and adults. He subsequently procured other examples between the Benue river and Lake Chad in Northern Nigeria. Mr. Neumann (J. f. O., 1890, p. 263) points out what he suggests as a subspecific character for distinguishing his *C. affinis togoensis*, founded on five specimens collected at Kratschi (Zech) and Bismarckburg (Büttner), in Camaroon, but these distinctions are not upheld by Reichenow.

The species has been recorded from Camma in Dahomey (F. Newton), and is generally distributed over the White Nile district down to Khartoum, where it has been procured by Antinori. The eastern bird was first described by Filippi as *C. corvina nubiæ* in 1863, while Heuglin's name *C. affinis*, published in 1855, remained without a description until the year 1871, and has therefore no right to be used. The type of *C. affinis* was procured by Heuglin in the Djur country, where he found these Shrikes in small parties frequenting the woodlands which extend to the Kosango River. They are, according to his observations, resident in the Upper White

Nile district, and to be met with there in great numbers, frequenting the higher branches of the thickly-foliaged trees. When perched have a habit of jerking their tails up and down. Their note, he remarks, much resembles that of our Missel Thrush, and they feed both on insects and fruit. Mr. Butler met with these birds very constantly in the forests between Wau and Chak Chak in the Bahr el Ghazal, "generally in parties of seven or eight, when they played a game of 'follow my leader' among the tree-tops. They were always remarkably wary, and it was difficult to get within shot of them."

Further south these Shrikes have been obtained in the Makraka and Kiri countries, and at Tarangola by Emin, also along the northern coast of the Victoria Nyanza from Uganda to Mount Elgon by Mr. Jackson; at Kitoto, in Kavirondo, by Mr. Neumann, and at Sigeijo by Fischer, but it has not been recorded from further east or south.

Corvinella souzæ.

Lanius souzæ, Bocage, Journ. Lisb. 1878, p. 213 *Caconda*; Gadow, Cat. B. M. viii. p. 254 (1883); Shelley, B. Afr. i. No. 701 (1896); Ogilvie-Grant, Nov. Zool. ix. p. 468 (1902); Reichen. Vög. Afr. ii. p. 621 (1903); Schiebel, J. f. O. 1906, p. 189, pl. G. fig. 1.

Adult male. Forehead, crown and back ashy grey, inclining to white on the sides of the forehead and crown; lores and ear-coverts sooty-black; a tinge of rufous on the sides and lower part of the upper back; outer half of scapulars white; tail dark brown, with broadish rufous bars on the centre feathers, while the others have white ends, rapidly increasing towards the external ones, which are white, with the exception of a dark brown band up most of the shaft; wings dark brown, with uniform rufous outer edges to the quills, except the innermost secondaries, which are rufous narrowly barred with black, like the broad outer edges of the wing-coverts; under surface of quills with very pale rufous-buff inner margins; under wing-coverts and axillaries white; sides of head black, with the lower portion of the cheek white like the under parts generally, but the latter is tinted with grey on the flanks. Iris brown; bill and feet black. Total length 6·8 inches, culmen 0·6, wing 3·1, tail 3·3, tarsus 0·9. Bulwa, ♂ (A. Sharpe).

Adult female. Differs only in the flanks being washed with rufous. Wing 3.2. Nyika Highlands, ♀ 6.95 (A. Whyte).

Sousa's Shrike ranges from the Congo into Benguella and Nyasaland.

The most northern known range for this species is Leopoldville on the Lower Congo, where it has been obtained by Bohndorff. In Angola both Mechow and Schütt met with it at Malandji, and in Benguella the type was discovered at Caconda by Anchieta, according to whose notes it is known to the natives as the "Numbotue," and at Quindumbo as the "Undola"; he also collected specimens at Galanga. It ranges eastward into Nyasaland, from whence there are specimens in the British Museum from the Nyika highlands (Whyte), Bulwa (A. Sharpe), and the Tanganyika Plateau (Manning), probably collected by the natives, which may account for our having no notes regarding the habits of this interesting species.

Genus III. FISCUS.

The members of this genus may be readily recognized as a rule by the black on the hinder half of the head extending down the whole length of the neck or back, while the sexes are distinguished by the females alone having some rufous on the flanks; one at least of these characters being always present. In other respects and in structural characters they resemble *Lanius*.

Type.

Fiscus, Bp. Rev. Zool. 1853, p. 433 *F. collaris*.
 Leucometopon, Bp. t.c. p. 438 *F. nubicus*.

The genus has generally been included in *Lanius* owing to the many characters common to both, but it appears to me deserving of recognition. It is essentially Ethiopian, one species only, *F. nubicus*, ranging to the eastern shores of the Mediterranean and into southern Persia. This latter species, with *F. newtoni* from St. Thomas Island, form a readily distinguishable group, the rump and upper tail-coverts being of the same black shade as the upper back, hind neck and crown; they also differ from the other members of the genus in the females not having more rufous on the flanks than the males. The remaining members of the genus are divisible into

three groups. In two of these the black of the hinder half of the head extends down the whole length of the neck; this includes the typical group of *F. collaris* and its allies with a more graduated tail and no broad white basal band to it and with the crown and entire hinder half of neck blackish. The group to which *F. cabanisi* and *F. excubitorius* belong is characterized by the long but less graduated tail which has a broad basal band of white. The third group, comprising only *F. mackinnoni*, has the entire crown and hinder half of the neck grey like the back and in this respect closely resembles the Shrikes which I have placed in the genus *Lanius*, but is distinguished from them not only by the rufous patch on the flanks of the females but also by there being no white bases to any of the quills.

KEY TO THE SPECIES.

- a. Base of centre tail-feathers black; wing not more than 4 inches.
 - a¹. Upper tail-coverts of the same colour as the back, hinder half of neck and the crown.
 - a². Back grey, quills entirely black *mackinnoni*.
 - b². Back black, or dusky brown in the females of *F. nubicus*.
 - a³. A broad whitish forehead, and base of both webs of primaries white *nubicus*.
 - b³. Entire forehead and outer webs of primaries jet black *newtoni*.
 - b¹. Rump and upper tail-coverts grey; crown and hinder half of neck black or nearly so.
 - c². Upper back of the same shade of black as the crown.
 - c³. Less white on the tail; greater portion of outer pair of tail-feathers black.
 - a⁴. A white eyebrow *marwitzi*.
 - b⁴. No white on upper half of head *smithi*.
 - d³. More white on the tail, greater portion of outer pair of tail-feathers white.
 - c⁴. Throat and breast tinged with grey *collaris*.
 - d⁴. Throat and breast white not tinged with grey.
 - a⁵. With no white on the upper half of the head . . . *humeralis*.
 - b⁵. Front of forehead and the eyebrows white . . *subcoronatus*.
 - d². Upper back grey.
 - e³. Secondaries with broad white ends, outer pair of tail-feathers with not more than their shafts black . . *somalicus*.
 - f³. Secondaries entirely black; outer tail-feathers with a large portion of their inner webs black . . *dorsalis*.

b. Base of tail-feathers white; wing about 4·5 inches, outer half of scapulars black.

*c*¹. Entire hinder half of neck and the crown black . . . *cabanisi*.

*d*¹. Crown and back of neck grey, a black band from the ear-coverts down the neck; more than the basal half of the tail white *excubitorius*.

Fiscus mackinnoni.

Lanius mackinnoni, Sharpe, Ibis, 1891, pp. 444, 596, pl. 13 *Kavirondo*; Shelley, B. Afr. i. No. 700 (1896); Jackson, Ibis, 1901, p. 34 *Nandi*; Ogilvie Grant, Nov. Zool. 1902, p. 468; Reichen. Vög. Afr. ii. p. 617 (1903); Schiebel, J. f. O. 1906, p. 187, pl. G. fig. 6, pl. H. fig. 1; Sharpe, Ibis, 1908, p. 328 *Camaroon*; Bates, Ibis, 1909, p. 36; Ogilvie-Grant, Trans. Zool. Soc. xix. p. 345 (1910) *Ruwenzori*; Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 315 (1910); id. Mittl. Zool. Mus. Berl. v. p. 83 *Rio Benito*.

Adult male. Upper parts mostly grey; scapulars white with the base of the feathers grey; wings black with the under wing-coverts mottled white and dusky grey and a silvery grey wash on the inner webs of the quills; tail black with moderate white ends to all but the centre feathers; a broad white eyebrow extending round the front of the forehead, a broad black band on sides of head including the lores and the upper two thirds of the ear-coverts; remainder of head and the under parts white. "Iris hazel; bill and legs black." Total length 8·4 inches, culmen 0·7, wing 3·4, tail 3·7, tarsus 0·9. *Bugemaia* (Jackson).

Adult female. Differs in having a patch of deep chestnut on the flanks.

Immature male. Like the adult male with no chestnut on the flanks, but some brown and blackish bars on the head, back and upper tail-coverts; a few narrow brown edges to the wing-coverts and quills and a few dusky bars on the flanks. Efulen ♂ 20. 5. 03 (Bates).

Mackinnon's Grey Shrike ranges over Equatorial Africa from Camaroon and Spanish Guinea to Nandi in British East Africa.

In Camaroon the species has been procured by Dr. Preuss at Buea, by Mr. Bates at Efulen and several other localities, by Mr. Sjösted at Itoki and by Mr. Zenker at Jaundi and Bipinde. Between the Albert Edward Nyanza and the Victoria Nyanza it has been met with by Emin and Stuhlmann in Ruhanga and Bukoba. The Ruwenzori expedi-

tion obtained a considerable number of examples on the eastern slopes of that mountain from an elevation of 6,000 ft up to the forest line. To the north-east of the Victoria Nyanza, the species was discovered at Bugemaia on the confines of the Kavirondo country by Mr. Jackson, who has since met with the same bird in the Nandi country.

This is a very remarkable Shrike in its colouring, the crown and back being grey, coupled with the quills being entirely black and the females being distinguishable by having a chestnut patch on the flanks. It forms a connecting link between *Fiscus* and *Corvinella*, in the absence of white on the primaries, and in the colouring of the rump and upper tail-coverts being like that of the crown and hind neck, while the grey and black of the upper parts give it a resemblance to *Lanius*.

Mr. Bates tells us that it is known as the "Asanze" or "Asese" in Camaroon. "It spends most of its time sitting motionless, but in plain sight on a twig or on a bush in a clearing. Sometimes it is seen to pounce suddenly down on the ground, probably to catch an insect or a frog, for I have found frog's bones in the stomach of one. I have never seen it in the forest." He subsequently adds, that though usually silent and morose, when the right mood comes it is a sweet singer. Its notes are slow and scattering but varied and sweet, and it introduces clever imitations of other birds. Mr. Bates suspects that it is a "butcher bird," as he once found the partially eaten body of a young bird impaled on a thorn-like twig of a dead bush, but beyond analogy he has no definite evidence of the perpetrator of this cruel act.

The British Museum, in addition to the type from Kavirondo, contains one example from Nandi (Jackson), a good series of a dozen skins from various localities in Camaroon all collected by Mr. G. L. Bates, and the birds

already alluded to as obtained by the Ruwenzori expedition, while at Tring there are a number of examples collected by Grauer in the Lake Kivu district of German East Africa.

Fiscus nubicus.

Lanius nubicus, Licht. Verz. Doubl. p. 47 (1823) *Nubia*; Dresser, B. Eur. iii. p. 417, pl. 153 (1871); Gadow, Cat. B. M. viii. p. 282 (1883); Sharpe, P. Z. S. 1901, vol. ii. p. 615 *Magois Country*; Ogilvie-Grant, Nov. Zool. ix. p. 464 (1902); Reichen. Vög. Afr. ii. p. 612 (1903); Ogilvie-Grant, Ibis, 1900, p. 149; 1901, p. 288 *Abyssinia*; 1902, p. 416; 1904, p. 266 *Danikil*; 1907, p. 591 *White Nile*; Butler, Ibis, 1905, p. 328, 1908, p. 225, 1909, pp. 80, 394 *Egyptian Sudan*; Schiebel, J. f. O. 1906, p. 197, pl. H, figs. 6, 7; Zedlitz, J. f. O. 1910, p. 803 *Eritrea*; Koenig, Ber. V. Intern. Orn. Kongr. 1910, p. 511 *Khartum*.

Phoneus nubicus, Shelley, B. Afr. i. No. 707 (1896).

Lanius personatus, Temm. Pl. Col. iii. pl. 256, fig. 2 (1824) *Akaba, Arabia*.

Lanius leucometopon, Mühle, Beit. Orn. Griechenl. p. 78 (1844) *Greece*.

Lanius leucopterus and *albicollis*, Heugl. Orn. N. O. Afr. p. 485 (1871), *nom. nud.*

Adult male. A broad forehead and eyebrows white, the former tinged with rufous-buff, mostly towards the bill; crown, hinder half of neck, entire back, upper tail-coverts and the six centre tail-feathers glossy jet-black; next pair of tail-feathers black with white ends; the outer two pairs are white, with black shafts and some black on their inner margins; scapulars almost entirely white; wings mostly black, with some whitish edges to the feathers, broadest on the inner secondaries; a broad basal portion of the nine long primaries white; axillaries and under wing-coverts white, with a dusky patch next to the primaries; cheek below the gape and the lower parts generally white, with a rufous tinge down the sides of the throat and across the crop, shading into pale cinnamon on the flanks. Iris brown; bill and feet black. Total length 7·7 inches, culmen 0·55, wing 3·6, tail 3·6, tarsus 0·9. Egypt, ♂ 25. 2. 68 (Shelley).

Adult female. Differs in the dark parts being more ashy and the under parts paler. Wing 3·45. Egypt, ♀ 25. 2. 70 (Shelley).

Immature. Differs in having black bars scattered mostly over the upper parts and sides of body; wing-coverts and secondaries with broad buff outer edges; no rufous on under parts. Smyrna, 20. 7. 71 (Krüper).

The Nubian Fiscal Shrike ranges from Senegal and the Lake Chad region eastwards to the neighbourhood of Lake Rudolf, and thence north through the Soudan and Abyssinia to Egypt and Western Asia as far as Persia, Asia Minor and Cyprus, where it is a common summer visitor according to Bucknill. It is said to have occurred in Greece.

In West Africa it must be rare. Hartlaub mentions it in 1857 as forming part of Verreaux's collection from Casamanse, and there is a specimen in the British Museum from Senegal from Bouvier's collection; Boyd Alexander collected a male at Damakuldia, near Lake Chad, on October 23, 1904.

The species is most plentiful in North East Africa. Petherick procured it in Kordofan. Mr. A. L. Butler writes from Sudan: "The Nubian Shrike is fairly common. It appears to be partly resident and partly migratory. It is comparatively seldom seen in the hot weather, the majority travelling down the Nile to Egypt in February and March. I have not seen a nest, but it breeds here in the winter. My Khartum specimen, shot on October 20, is very young, and Messrs. Rothschild and Wollaston noticed young birds at Shendi in February and March. With habits very like those of the Woodchat, it is a great frequenter of gardens and groves of shady trees, and is much more often found in these than in the open bush." Mr. Butler also found this species common at Suakim and the neighbourhood in March, but did not meet with it in the Bahr el Ghazal.

There can be no doubt that the greater number of the Masked Shrikes in North-East Africa are only there during the winter, and there is no definite evidence that any birds breed except Butler's remark quoted above. In the Province of Giza in Egypt it is stated by Nicoll to be a common species in the spring migration, but less so in autumn. This is confirmed by an examination of the dated examples from

Egypt in the British Museum, twelve of which were taken in March and two in February.

The most southern locality yet recorded is the Magois country, near Lake Rudolf, where Dr. Donaldson procured a female in February.

The habits of the Masked Shrike are like those of the Wood-Chat; but it is rather more partial to groves of trees, where its well-marked plumage renders it very conspicuous. With regard to its breeding, the Rev. Canon Tristram writes: "The nest is remarkably neat, like that of the Chaffinch, but of course wider and shallower, placed on a branch or fork and lined with fine roots or fibres. The eggs, four or five in number, though Shrike-like, have a distinct character, the ground being generally olive and the spots always arranged more or less in a zone near the broad end. They can scarcely be mistaken for those of any other bird." They measure 0.77 to 0.87 by 0.59 to 0.68.

There is a large series of this species in the British Museum in addition to those already mentioned, viz.: *Abyssinia*—Kumayli, February, and Ain, August (Blanford); Billen, January (Degen); Kassim, January (Lovat). *Soudan*—Khartum, February, March (Dunn); Renk, January (Zaphiro); Kaka, February; El Dueim, May 23; Fashoda, April (Hawker). Also from Arabia (Yerbury), Persia (Witherby and Gillett), Egypt (Shelley and Gurney), Palestine (Tristram), Smyrna (Krüper), and Cyprus (Lilford and Miss Bate). At Tring there are examples from Eritrea, November (Beccari); Dongola, February and March; Naikhale on the Atbara, February; Shendi, March (N. C. Rothschild and Wollaston), and Khartum, March (Emin Pasha).

Fiscus newtoni. (Pl. 53, fig. 2.)

Lanius (Fiscus) newtoni, Bocage, Journ. Lisb. 1891, p. 79 *St. Thomas Island*.

Fiscus newtoni, Shelley, B. Afr. i. No. 696 (1896).

Lanius newtoni, Grant, Nov. Zool. 1902, p. 467; Reichen. Vög. Afr. ii. p. 607 (1903); Schiebel, J. f. O. 1906, 187.

Adult.—Upper parts including the entire back and upper tail-coverts jet black with a greenish-blue gloss; broad ends to the outer scapulars white; five outer pairs of tail-feathers with white ends, the white not extending down the outer webs but covering nearly the whole of the inner web of the exterior pair; wings, above entirely black, beneath there are broad whitish inner margins to the quills, the coverts white with a dusky patch next to the primaries; axillaries white with dusky bases to the feathers; cheeks below the gape, and the under parts generally white. Iris brown; bill black, feet blackish brown. Total length 8·0 inches, culmen 0·65, wing 3·7, tail 4·6, tarsus 0·95. *St. Thomas Island*, ♂ —. 9. 90 (Newton).

Whether the female has the tawny patches on the flanks characteristic of most of Fiscal Shrikes is uncertain. Nothing is mentioned by Bocage in the original description on this point.

A young bird is brownish black above, below yellowish; wings and tail dusky; tail feathers with yellowish tips (Bocage).

Newton's Fiscal Shrike is confined to the Island of *St. Thomas*. Mr. Alfred Newton, its discoverer, collected five specimens on this island, where it is probably not rare, and it is represented in the British Museum by one of his examples.

This appears to be a male, and it, together with another male, a female, and two young birds, were collected at *S. Miguel* and on the *Rio Quiga* on the west coast of the Island. The female hardly differs from the male according to Bocage except for the purer white of its underparts.

Fiscus collaris.

Lanius collaris, Linn. S. N. i. p. 135 (1766) *Cape of Good Hope*; Gadow, Cat. B. M. viii. p. 255 (1883); Grant, Nov. Zool. 1902, p. 446; Stark and Selater, Birds S. A. ii. p. 6 (1901); Reichen. Vög. Afr. ii. p. 607 (1903); Shortridge, Journ. S. A. Orn. Union, 1905, p. 22 *Hanover*; W. Selater, Ibis, 1911, p. 283 *Cape Colony*.

Lanius collaris collaris, Schiebel, J. f. O. 1906, p. 185.

Fiscus collaris, Shelley, B. Afr. i. No. 693 (1896); Oates, Cat. B. Eggs, B. M. iv. p. 282 (1903); Sharpe, Ibis, 1904, p. 341 *Deelfontein*.
Le Fiscal, Levaill. Ois. Afr. ii. pls. 61, 62 (1799).

Adult male.—Upper parts mostly slaty black; scapulars pure white; lower back and upper tail-coverts grey, five outer pairs of tail-feathers, with white ends, increasing in size to the outer pair, which are mostly white, the black portion being confined to the basal part of the inner web, and concealed by the coverts; quills with little or no pale terminal margins, but a broad basal portion of the primaries is pure white, and there is some pale inner edging to most of the quills; under wing-coverts white, with a dusky patch next to the primaries; axillaries black, with some white edging; lower portion of cheeks and the under parts whitish, with a faint grey mottling of varying development, a slight mottling of blackish on the thighs. Iris brown; bill and feet black. Total length about 9.0 inches, culmen 0.75, wing 3.9, tail 4.6, tarsus 1.1. *Deelfontein*, ♂ 20. 5. 02 (Sloggett).

Adult female. Differs in having a patch of chestnut on the flanks (and sometimes a trace of white in front of eye, near the forehead). Wing 3.8. *Deelfontein* ♀ 20. 5. 02 (Sloggett).

Immature. Head, neck, back, scapulars, lesser wing-coverts and flanks buff, with narrow black bars; edges of greater coverts, secondaries, and most of the upper tail-coverts rufous; pale portion of tail tinged with rufous. Bill horny black, fading into yellow on the basal half of lower mandible. *Cape Town*, 14. 1. 74 (Shelley).

The Fiscal, as this Shrike was originally named by Levaillant, is practically confined to Cape Colony; to the north of the Orange River it is replaced by *F. subcoronatus*, with which, however, it undoubtedly often interbreeds; while to the east in Natal it gradually merges into *F. humeralis*, distinguished by its pure white under-parts.

Messrs. Stark and Selater write: "The Fiscal is exceedingly common in and around Cape Town, and is generally to be seen perched on a post or dead branch of a tree, whence it can obtain a good view of its surroundings; it attacks other birds, rats, snakes, lizards, small fish, crabs, and large insects, such as locusts. It is always dangerous to expose canaries and other cagebirds on verandahs or in gardens, as they are sure to be murdered sooner or later. It impales its prey on the thorns of various bushes, or on the spikes of an aloe;

sometimes when no other suitable spot is available, it will hang its victims by the neck from the narrow fork of a tree. Its flight is very characteristic, low, undulating, straight, and, as a rule, not prolonged. This Shrike has a fairly sweet song, to which it gives vent both in the breeding season and at other times; but, as a rule, its note is a harsh squawk."

It breeds often as early as August in the western part of Cape Colony.

Claude Grant, who collected a good series of this species at Port Nolloth and Klipfontein, in Namaqualand, in the neighbourhood of Cape Town and at Plettenberg Bay, took a nest containing three eggs on September 24, near Cape Town; it was composed of twigs of a common herbaceous plant, interspersed with rag and string, and lined with fine grass and fibre; it was placed in the fork of an apple tree in an orchard, at about 12 ft. above the ground.

Fiscus humeralis.

- Lanius humeralis* Stanley, in Salt's Trav. App. pp. li. and xlv. (1814)
Chelicut, Abyssinia; Ogilvie-Grant, Nov. Zool., 1902, p. 466;
 Reichen. Vög. Afr. ii. p. 609 (1903), iii. p. 834 (1905); Ogilvie-Grant, Ibis, 1904, p. 267 *S. Abyssinia*; Erlanger, J. f. O. 1905, p. 700 *N.E. Afr.*; Swynnerton, Ibis, 1908, p. 46 *Gazaland*; Ogilvie-Grant, Trans. Zool. Soc. xix. p. 345 (1910) *Ruwenzori*; Bannerman, Ibis, 1910, p. 689 *Somaliland*.
- Lanius collaris humeralis*, Hartert, Nov. Zool., 1902, p. 621 *Kikuyu*; Neumann, J. f. O. 1905, p. 227 *Shoa*; Schiebel, J. f. O. 1906, p. 186, pls. G. H.; Zedlitz, J. f. O. 1910, p. 802 *Eritrea*; Swynnerton, J. S. Afr. Orn. Union, 1911, p. 10 *Gazaland*; W. Selater, Ibis, 1911, p. 283 *Transvaal*.
- Fiscus humeralis*, Oates, Cat. B. Eggs, B. M. iv. p. 282, pl. xii. (1903); Jackson, Ibis, 1906, p. 550 *Toro*.
- Lanius fiscus*, Cat. Mus. Hein. i. p. 74 (1850) *Abyssinia*.
- Lanius arnaudi*, Bp. Rev. Mag. Zool., 1853, p. 434.
- Lanius pyrrhostictus*, Holub and Pelzeln, S. Afr. p. 97, pl. ii. (1882) *Transvaal*.

- Lanius uropygialis*, Reichen. J. f. O. 1905, p. 560 *East Africa*;
 Sjöstedt, Kilimandjaro-Meru Exped. Vög., p. 115.
Fiscus collaris (non Linn.) Clarke, Ibis, 1904, p. 525 *Bloemfontein* and
Upper Natal; Neave, Ibis, 1910, p. 226 *Katanga* and *N.E. Rhodesia*.
Lanius collaris (non Linn.) L. E. Taylor, Journ. S. Afr. Orn. Union,
 1906, p. 65 *Transvaal*; Stoehr and W. Selater, *ibid*, p. 94
N.E. Rhodesia; C. H. Taylor, *ibid*. 1907, p. 19 *Swaziland*;
 Swynnerton, Ibis, 1907, p. 45 *Gazaland*.

Adult male. Resembling in most respects *F. collaris*, but the black of the back of a darker and more sooty shade, but not shiny as in *F. smithi*; below white, sometimes faintly washed with tawny, but never with the grey vermiculation characteristic of *F. collaris*; tail-feathers very similar to those of *F. collaris*, the outer pair being white, except for the bases, which are concealed by the coverts. Total length about 10.0, culmen 0.65, wing 3.7, tail 5.0, and tarsus 1.0. Harrar, ♂, 29. 12. 99 (Lovat).

Adult female. Differs in having the chestnut patch on the flanks; the black of the back is less sooty and more brownish. Wing 3.60. Harrar ♀, 24. 11. 00 (Pease).

Immature. Resembling that of *F. collaris*.

Stanley's Fiscal Shrike ranges from Eritrea and northern Abyssinia through East Africa and Nyasaland to Natal. To the west it apparently intergrades with *F. smithi*, as an example collected by Emin at Makroka, in what is now the Lado enclave, has the back a more shiny black, and the white tips to the secondaries more strongly marked than in the typical *F. humeralis*, but the outer tail-feathers are intermediate between those of *F. humeralis* and *F. smithi*. This is also the case with three Fiscal Shrikes from the Ruwenzori collection, which also appear to be intermediate between *F. smithi* and *F. humeralis*. There appears to be no constant distinction between the Fiscal Shrikes of Abyssinia, British East Africa, Nyasaland, and Natal.

Reichenow distinguishes the East African Fiscal Shrikes as *Lanius uropygialis*, because the lower portion of the rump is white, and contrasts with the upper portion, but birds from Abyssinia, as well as those from East Africa and Nyasaland, vary considerably among each other in this respect.

The most northerly locality for this Shrike seems to be Cheren in Eritrea, whence it has recently been brought by Zedlitz. Blanford (Abyssinia, p. 338), says: "Very common throughout the highlands, and seen as low as the Anseba Valley, where, however, it is rare. It is usually seen sitting on the tops of bushes, and then pouncing down upon insects. It breeds in the rainy season. I shot a female containing a completely developed egg on July 18." Erlanger found that it nested in low bushes near Harrar about nine feet from the ground; he took several nests in April, 1900, containing two to three eggs.

Doherty (Nov. Zool. 1902, p. 521) obtained a good series of this Shrike in the Kikuyu country; he found it nesting in December at 8,000 ft., and Sjöstedt has recently found it quite common in the Kilimanjaro region from the plains up to about 5,500 ft. Further south, in the Melssetter district of S. Rhodesia, Swynnerton states that it is by no means abundant, though widely distributed. By the natives it is there called "Mutungadzorera," meaning "impaler of gamey food" in allusion to its Butcher Bird habits, while it is known as "Laksman" among the local Dutch. A nest found on October 7 was situated seven and a half feet from the ground in the fork of a tree. It contained four fresh eggs measuring 1.0×0.75 ; these were pale dull greenish, speckled all over with light olive brown, with a few underlying iron-grey markings.

The Fiscal Shrike of Natal is certainly referable to this species. It is a well-known bird there, and is found throughout from Durban to Newcastle; the English colonists call it "Johnny Hangman," from its habit of impaling its prey, in which respect it resembles its near ally in Cape Colony.

In Natal it breeds, as a rule, from October to December.

A nest found on October 11, near Pinetown in Natal, was placed about 12 ft. above the ground in a bush standing near some green trees; it was wedged in between two upright branches, two or three small twigs being built into the sides; the nest was loosely constructed on the outside, and was almost entirely composed of the "Kaffir tea plant"; towards the cavity the construction was more compact and a few feathers had been worked in; the cavity, which measured about 3 in. across and $2\frac{1}{2}$ in. deep, was lined with a few feathers, a little dry grass, and some very fine rootlets. The eggs are usually four in number, the colour is very pale green spotted with pale brown, with usually a ring of heavy blotches of brownish-purple surrounding the egg towards its obtuser end; measurements vary from 1.0×0.70 to 0.92×0.75 .

There is a very large series of this species in the British Museum from the following localities: Abyssinia (Blanford, Jesse, Lovat, Degen, and Zaphiro); British East Africa from the Mau Escarpment to Kilimanjaro (Jackson, Delamere, and Johnston); Uganda (Jackson); British Central Africa (Johnston and Sharpe); Gazaland (Swynnerton); Natal, from Durban to Newcastle (Oates, Buckley, and Butler).

Fiscus smithi.

- Collurio smithi*, Fraser, P. Z. S. 1843, p. 16 *Cape Coast Castle*.
Lanius smithi, Gadow, Cat. B. M. viii. p. 258 (1883); Ogilvie-Grant, Nov. Zool. ix. p. 467 (1902).
Fiscus smithi, Shelley, B. Afr. i. No. 695 (1896); Kemp, Ibis, 1905, p. 233, *Sierra Leone*.
Lanius humeralis smithi, Reichen. Vög. Afr. ii. p. 610 (1903).
Lanius collaris smithi, Schiebel, J. f. O. 1906, p. 187.
Lanius humeralis congicus, Reichen. J. f. O. 1902, p. 258 *Angola*; id. Vög. Afr. ii. p. 610 (1903); Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 314.
Lanius collaris congicus, Schiebel, J. f. O. 1906, p. 186.

Subspecies a. Fiscus camerun̄iensis.

- Lanius humeralis camerun̄iensis*, Reichen. Orn. Monatsb. 1910, p. 191 *Adamawa*; id. Mittl. Zool. Mus. Berl. v. p. 223 (1911).

Adult male. Upper parts mostly jet black with a greenish-blue gloss on the head and mantle; scapulars pure white; lower back and upper tail-coverts grey, generally fading into white on the rump, which is mingled grey and white; five outer pairs of tail-feathers with white ends, increasing in size to the outer pair, where the exterior web is nearly, but not entirely, white, and the inner web is more black than white, the white tip not exceeding 0.5 inches in length in typical examples; wings, with some white terminal edges to the quills, almost confined to the secondaries; primaries with a broad white basal portion forming a speculum; under wing-coverts white with a dusky patch next to the primaries; axillaries blackish with broad white outer edges; cheeks below the gape, and the under parts generally, pure white, with a trace of black mottling on the thighs. Iris dark brown; bill black; feet greyish black. Total length 7.7 inches, culmen 0.65, wing 3.3, tail 4.3, tarsus 0.9. Cape Coast Castle, ♂, 7. 3. 72 (Shelley).

Adult female. Differs in having a slight shade of cinnamon on a few of the feathers of the flanks. ♀, 7. 3. 72. (Shelley).

Immature. Similar to those of *L. collaris*.

Subspecies F. smithi camerunensis. "Upper tail-coverts entirely grey like the rump, and the outer tail-feathers with a very broad white outer margin" (Reichenow).

Smith's Fiscal Shrike ranges over West Africa from the Los Islands off French Guinea, and from Sierra Leone south to Northern Angola and inland to the Mombattu country in the north-east and Lake Kivu in the eastern portions of the Congo Free State, where it appears to merge with *F. humeralis*, as can be seen by an examination of examples from the Lado and Ruwenzori regions in the British Museum.

Reichenow has separated birds from Angola and the Lake Districts under the name of *F. humeralis conqicus*, owing to their being more sooty on the back, but a series collected by Ansorge at M'Dalla Tando, in northern Angola, are certainly quite indistinguishable from typical West African birds in this respect. He has also separated as a subspecies the Fiscal of the Adamawa country in the interior of Camaroon, but I have not had an opportunity of examining examples from there.

From Sierra Leone Mr. Robin Kemp writes: Common and resident throughout the year. Breeds in May and June. The

type was discovered by Fraser in the Gold Coast Colony, where I found it very common, constantly to be seen prominently exposed on the top of a bush or anthill. It was equally plentiful at Cape Coast Castle as well as in the forest at Abrobonko and at Accra.

Boyd Alexander procured specimens at Krachi and Pong; he writes (*Ibis*, 1902, p. 310): "A common species from Krachi down the coast, but not met with in the Hinterland." Young individuals were found at the end of May. It has been recorded at several places in Togoland, and was obtained at Abeokuta in southern Nigeria by Robin. There are specimens from Kabinda in Portuguese Congo (Sperling) and from Kambembe (Monteiro) and M'Dalla Tando (Ansorge) in northern Angola, in the British Museum. South of this it seems to be replaced by *F. subcoronatus*.

The British Museum contains examples from the following localities: *Sierra Leone*—Bo (Kemp); *Gold Coast Colony*—Accra (Smith) Cape Coast Castle and Abrobonko (Shelley); *S. Nigeria*—Abeokuta (Robin); *Portuguese Congo*—Cabinda (Sperling); *Angola* (Monteiro and Ansorge).

Fiscus subcoronatus.

Lanius subcoronatus, Smith, Ill. Zool. S. Afr. Av. pl. 68 (1841) *Latakoo*; Gadow, Cat. B. M. viii. p. 260 (1883); Ogilvie-Grant, Nov. Zool. 1902, p. 466; Reichen. Vög. Afr. ii. p. 611 (1903); Shortridge Journ. S. Afr. Orn. Union 1905 p. 22 *Hanover*; Schiebel, J. f. O. 1906, p. 183, pl. 4, fig. 2; Swynnerton, *Ibis*, 1908, p. 48 *Gazaland*; Chubb, *Ibis*, 1909, p. 160 *Bulawayo*.

Fiscus subcoronatus, Shelley, B. Afr. i. No. 694 (1896); Clarke, *Ibis*, 1904, p. 526 *Bloemfontein*.

Lanius capelli, Bocage, Journ. Lisb. 1879, p. 93 *Cassanga*; Reichen. Vög. Afr. ii. p. 611 (1903); Schiebel, J. f. O. 1906, p. 183.

Adult male. Upper parts mostly sooty black; front of forehead and a broadish eyebrow white; scapulars pure white and some white terminal margins to the quills; lower back and upper tail-coverts grey fading into white on the rump; five pairs of outer tail-feathers with white ends increasing

in amount to the outer one, which is entirely white, except for a little streak of dark along its base at the shaft; quills, with a broad basal portion of the primaries white and some pale inner edges to most of the quills; under wing-coverts white with a dusky patch next to the primaries; axillaries black with some white outer edging; lower portion of cheeks and under parts white with a slight mottling of black on the thighs. "Iris brown; bill and feet black." Total length 8·7, culmen 0·75, wing 3·8, tail 4·5, tarsus 1·05. Otjimbingue, ♂, 7. 10. 64 (Andersson).

Adult female. Differs in having some chestnut on the flanks.

Immature. Similar to those of *L. collaris*, from which they differ in having a strongly marked whitish eyebrow.

The Coroneted Fiscal Shrike ranges from Angola to the Orange River Colony, the Transvaal and Rhodesia.

The most northern limit known for this species is Cas-sanga in 9° 30' S. lat. between the Kuango and Quanza Rivers, where the type of *Fiscus capelli* was procured by Capello and Ivens. According to their notes it is there known to the natives as the "Quiquecuria" or "Quimbembe." In Mos-samedes Anchieta has obtained examples on the Rio Coroca. It is generally distributed over German S.-W. Africa; Chapman records this Shrike as common in Damaraland, and both he and Andersson observe that it entirely replaces *L. collaris* in that country, and according to the latter naturalist it is abundant in the northern parts of Great Namaqualand, in Damaraland, and the adjacent country to the east and north. Mr. Guillemard considers that it also replaces *L. collaris* to a certain extent, in the Orange River Colony and the country north of Kimberley. The type of the species was discovered, and has been well figured, by Sir Andrew Smith, who writes: "The first specimen we obtained was killed near Latakoo (not far from Kuruman), and many others were added to our collection as we proceeded northward, although we never found the species common in any of the districts we visited. When *L. subcoronatus* appeared *L. collaris* ceased to be found, and we had every reason to believe that the former held to the north-

ward of Latakoo, that place which the latter holds to the southward." Stark and Selater, in their "Birds of South Africa" (ii. p. 9) write: "It is common in Griqualand West, and according to Dr. Bradshaw is very abundant along the Orange River in the neighbourhood of Upington, a locality in which *L. collaris* occurs. "A clutch of three eggs was taken by Mr. A. F. Ortlepp on October 15, 1884, at Du Toits Pan (*i.e.*, Kimberley); these eggs closely resemble those of *L. collaris*, measuring about 0.90×0.70 ."

In the Transvaal specimens have been collected by Dr. Rendall in the Barberton district and by Mr. T. Ayres at Potchefstroom. From the latter place Dr. Bowdler Sharpe had one killed in March in his own collection, and another, a fine adult female obtained in May, 1879, formed part of my own collection. On comparing this specimen with a fine series of *F. humeralis* I then had of Colonel A. E. Butler's collecting at Newcastle in Natal, I found that several of the latter had the forehead and eyebrows mottled with white, as if the two forms were liable to interbreed, and I have found this to be also noticeable in other South African specimens obtained near where the range of these allied species meet.

This is confirmed by most observers in the field. Shortridge noticed it at Hanover in northern Cape Colony and Clarke states that he actually found a female *F. collaris* breeding with a male *F. subcoronatus* at Bloemfontein in October.

In the British Museum there are many intermediate forms between *F. collaris*, *F. humeralis* and *F. subcoronatus*, chiefly from the Orange Free State and the Transvaal.

From Bloemfontein there is a female with a fairly well-marked eyebrow, some white on the rump, hardly any on the secondaries and grey freckled under-parts, on the whole referable to *F. subcoronatus*, but with traces of *F. collaris*. This example was collected by Clarke, August 17, 1901.



1. *Ficus marwitzi*.
2 " *newtoni*

Another from the Tweeddale collection from the same place has all the characters of *F. humeralis*, but for a small spot of white at the lores. A third, also a female from Bloemfontein, dated June 15, 1903, obtained by Messrs. Woosnam and Dent, is indistinguishable from the typical *F. collaris* of Cape Town. A female from Vredefort Road Station (Barrett-Hamilton) is an undoubted *F. humeralis*, while two males from Kroonstad have traces of the white eyebrow.

To sum up, the Coroneted Fiscal Shrike has its centre of distribution in German South-West Africa. Where its range meets that of *F. collaris* and *F. humeralis* it interbreeds, and intermediate forms are as prevalent as those apparently true to type.

The British Museum contains typical examples of this species from Koy's Fountain in Great Namaqualand and from Otjimbingue and Swakop River in Damaraland (Andersson), from the Hart River in Bechuanaland (Jameson) and from Kuruman (Woosnam); examples of *F. collaris* × *F. subcoronatus* from Bulls Port in southern Great Namaqualand (Andersson) and from Bloemfontein (Clarke); of *F. humeralis* × *F. subcoronatus* from Maribogo on the Vaal River in north Cape Colony (Woosnam), from Bloemfontein and Kroonstad in the Orange Free State, and from Salisbury and Mount Chirinda in southern Rhodesia (Swynnerton).

Fiscus marwitzi. (Pl. 53, fig. 1.)

Lanius marwitzi, Reichen. Orn. Monatsb. 1901, p. 90 *Uhehe*; id. Vög. Afr. ii. p. 611 (1903); Schiebel, J. f. O. 1906, p. 187.

Adult male. Resembling *F. smithi* in the glossy jet black of the upper parts and *F. subcoronatus* in the broad complete white eyebrow from the nostril to above the ear-coverts; rump and upper tail-coverts lead-grey without any white, the latter with some black at the ends of the longer feathers; tail black, with white ends to the four outer pairs of feathers; outer feather white with a wedge-shaped black patch extending on the inner web half way up the shaft; the next feather has the outer web and nearly a third of

the end of the inner web white. Iris brown; bill and feet black. Total length 8.2 inches, culmen 0.7, wing 3.5, tail 4.6, tarsus 1.0. North Nyasaland, —. 9. 04 (A. Sharpe).

The female, according to Reichenow, has the tawny flank patches characteristic of all the Fiscal Shrikes.

Marwitz's Fiscal Shrike ranges over the Nyasa-Tanganyika Plateau.

Mr. Marwitz, who discovered the species in the Uhehe country, obtained specimens at Ngomingi in July and August, and in the British Museum there is a fine example of this rare Shrike obtained by Sir Alfred Sharpe north of Lake Nyasa in September, 1904.

This species appears to bear the same relation to *F. smithi* which *F. subcoronatus* does to *F. collaris* or *F. humeralis*, and as compared with *F. subcoronatus* differs in its slightly smaller dimensions, its darker beak and in having a little more black on the outer tail-feathers.

Fiscus somalicus.

Lanius somalicus, Hartl. Ibis, 1859, p. 342 *Bender Gam*.

Lanius antinorii, Salvad. Ann. Mus. Genova, 1878, p. 316 *Afmu, Danikil coast*; Gadow, Cat. B. M. viii, p. 255 (1883); Sharpe, P.Z.S. 1901, ii. p. 615 *Lake Stephanie*; Ogilvie-Grant, Nov. Zool. 1902, p. 463; id. Ibis, 1904, p. 267 *Dabas*; Reichen. Vög. Afr. ii. p. 614 (1903); iii. p. 835 (1905); Witherby, Ibis, 1905, p. 519 *Dibbit*; Erlanger, J. f. O. 1905, p. 701 *N. Somaliland*; Schiebel, J. f. O. 1906, p. 188.

Lanius antinorii mauritii Neumann, J. f. O., 1907, p. 595 *Karoli mountains*.

Adult male. Upper half of head, hinder half of neck and front of mantle black; remainder of mantle and back pearl grey fading into white on the end half of the scapulars and the upper tail-coverts; wings black, with a broad basal portion of the primaries white, and the secondaries with broad terminal margins of white and some less defined terminal white margins to the inner primaries; under wing-coverts white with a rounded patch near base of primaries and the axillaries black; tail black with white ends to all but the two centre feathers (often a small apical spot of white seen on these) increasing in size towards the two outer pairs which are entirely white or with only a portion of their shafts black. "Iris brown; bill and feet black."

Total length 8·6 inches, culmen 0·7, wing 4·0, tail 4·1, tarsus 1·0. Ujawaji, ♂ 10. 12. 97 (Hawker).

Adult female. Like the male with no chestnut on the flanks. Dadab, ♀ 15. 11. 99 (Harrison).

Immature. Upper parts rufous tinted ashy brown inclining to white on the rump; quills, with the exception of the innermost one, blackish with the same amount of white as in the adult; tail also with the same amount of white as in the adult, but the dark part is browner and inclines, at its extremity, to pass into rufous buff; under-parts shaded with ashy brown across the crop and on the flanks. Bill pale horny brown; feet brown.

The Somali Fiscal Shrike ranges over the northern half of Somaliland and southern Abyssinia.

The oldest name for this species is *Lanius somalicus*; this has generally been set aside upon the plea that it has not been sufficiently described and the types no longer exist. Heuglin discovered the species in the country of the Ker-Singeli Somali, where he preserved two specimens which he afterwards lost in a fight with the natives. His notes regarding these specimens, from which Hartlaub published the description of his *L. somalicus*, mentions that the tail was similar to that of *L. minor*, so evidently the outer tail-feathers must have been entirely white, which is not the case with the nearly allied *L. dorsalis*, and we also know that Heuglin visited the Berbera district, where the present species is abundant, and never entered the country which *L. dorsalis* is known to inhabit, so it appears to me that we have no right to reject the name *L. somalicus* for the northern Somali species.

The species has representatives in the British Museum from Haigaisa (Delamere); Gorili, west of Egder and Bisi (Donaldson Smith); Debas (Degen); Lehillia (Benett Stanford); Ujawaji (Hawker), Sheik Pass, Wagga, Berbera (Lort Phillips); Berbera (Brookman); and Dadab near Teita (Harrison), all in northern Somaliland and the Galla country, while there

is one example from Dibbit, about 120 miles north-west of Obbia on the east coast of Somaliland, obtained by Captain Hamerton. This is the most southern point of the range.

This species replaces *L. dorsalis* to the north of about 5° N. lat. in the Somali districts between Lake Stefanie and the Berbera Danakil coast; on the latter, at Afmu, Antinori obtained the type of *L. antinorii*. Erlanger found it in great abundance in northern Somaliland, where it was apparently arriving from the Abyssinian highlands in January and February. The nest he describes as similar to that of *L. collurio* but more lightly constructed, and placed in a bush or on an acacia tree at not more than 9 ft. from the ground. The eggs were also very like those of our Red-backed Shrike, being of a dull yellowish white with large pale ashy grey spots mostly at the thick or narrow end, forming a zone at one of these ends, and measured out of eight eggs 0.92×0.75 . He took two nests, each containing four eggs, at Dadab on January 24 and 29.

Neumann has recently described a new subspecies—*Lanius antinorii mauritii*, differing as he states from the typical *L. antinorii* in the sharp line of distinction between the black head and grey back, plain white rump and upper tail-coverts, and grey, not black, axillaries. Only one example—a male from the Karoli Mountains—was obtained, but it is assumed that Mr. Donaldson Smith's specimens from Lake Stephanie and Gorili should be referred to this form. One of these, from Gorili, cannot be distinguished from the typical Somaliland birds, and it seems unnecessary to keep the Galla country bird separate.

Fiscus dorsalis.

Lanius (Fiscus) dorsalis, Cab. J. f. O. 1878, pp. 205, 225 *Ndi*.

Lanius dorsalis, Shelley, B. Afr. i. No. 699 (1896); Ogilvie-Grant, Nov. Zool. 1902, p. 463; Reichen. Vög. Afr. ii. p. 614 (1903); Erlanger, J. f. O. 1905, p. 701 *S. E. Somaliland*; Schiebel, J. f. O. 1906, p. 188; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 116 (1910).

Adult male.—Top of head, hinder half of neck and front of mantle black, rather sharply separated from the pearl grey of the remainder of the back; end half of the scapulars and the upper tail-coverts almost white; wings black, with only a broad basal portion of the primaries white; no white on the tips of the secondaries; the under wing-coverts white with the rounded patch near the base of the primaries and the axillaries black; tail black, with the extreme base white, and with white ends to all but the four or sometimes six centre feathers, increasing in size towards the outer pair where the white extends down to the base of the outer web only and does not exceed 0.75 on the inner web; under parts white, with the flanks slightly greyish. "Iris brown; bill and legs black." Total length 8.5 inches, culmen 0.7, wing 4.0, tail 3.9, tarsus 1.1. Turquel (Jackson).

Adult female.—Differs in plumage from the male only in having a patch of deep chestnut on the flanks. Wing 3.75 inches.

Immature.—The black of the head and wing-coverts mottled with ashy brown and some black bars; quills with whitish terminal edges. Kitui, 3. 8. 03 (Storey).

The Teita Fiscal Shrike ranges from the Usambara and Kilimanjaro districts of German East Africa into southern Somaliland. The species is represented in the British Museum from Kitui (Storey), and Likipia (Delamere) in British East Africa; from Geledi (Gillett) and Somaliland (Lort Phillips), while at Tring I have seen specimens from the Voi river (Ansorge) and Lake Stephanie (Donaldson Smith). The absence of white on the secondaries and the lesser amount of white on the tail-feathers at once distinguishes it from *F. somalicus*. The most southern range known for this Shrike is the Voi River between Kilimanjaro and the sea, where it has been procured by Dr. Ansorge, while the type was discovered at Ndi in the Teita country by Hildebrandt, who also met with the species at Melembou in Ukamba. Sjöstedt

found this bird fairly common in Usambara, but only met with it twice in the Kilimanjaro neighbourhood, generally in country with scattered acacia bush. To the north of the Equator, in the Turquel Suk country, Mr. Jackson procured a fine adult male, and wrote on the label: "Crop contained part of a mouse, a large caterpillar, spiders, &c." In Somaliland, specimens have been collected by Revoil, Ruspoli and Mr. Lort Philipps, and, according to the latter naturalist, these were "only met with on the table-land, where they appeared to be fairly plentiful." Erlanger during his travels in south-eastern Somaliland met with a great rush of these Shrikes up the Juba River from Kismaju and Bardera into the Garre Lewin country between May 1 and July 11.

Fiscus cabanisi.

- Lanius caudatus* (non Brehm), Cabanis J. f. O. 1868, p. 412; 1869, pl. 3; id. Deeken's, Reis. iii. p. 28, pl. 5 (1869) *Mombasa*; Gadow, Cat. B. M. viii. p. 254 (1883); Grant, Nov. Zool. 1902, p. 468; Reichen. Vög. Afr. ii. p. 613 (1903); Erlanger, J. f. O. 1905, p. 701 *Umfudu*; Schiebel, J. f. O. 1906, p. 174, pls. G. fig. 3, ♀ ad, E. fig. 7, juv.; Gurney, Ibis, 1909, p. 498 *Nairobi*; Bannerman, Ibis, 1910, p. 688, *Mombasa*; Sjöstedt Kilimandjaro-Meru Exped. Vögel, p. 146 (1910).
Fiscus caudatus, Shelley, B. Afr. i. No. 697 (1896); Oates, Cat. Bird's Eggs B. M. iv. p. 283, pl. xiii. fig. 2 (1905).
Lanius cabanisi, Hartert, Nov. Zool. xiii. p. 404 (1906).

Adult male.—Top and sides of head, hinder half of neck and front and sides of mantle black, shading into dusky grey on the upper back and inner half of the scapulars; middle back paler grey fading into white on the rump and tail-coverts, which latter are often tinged with grey and show a few traces of the black bars of the immature plumage; tail black with a white basal portion not reaching to the end of the tail-coverts, and sometimes a few white terminal edges to the feathers, but no white tips; wings black with broad white bases to the primaries and sometimes a few white terminal margins mostly developed on the secondaries; under wing-coverts white mottled with black; axillaries black; entire underparts white. Iris brown; bill and feet black. Total length 11.7 inches, culmen 0.8, wing 4.5, tail 6.3, tarsus 1.25. Kitui, 1. 8. 03 (Storey).

Adult female.—Differs in having a large patch of dark chestnut on the flanks. Wing 4.2 inches. Kitui, 27. 7. 03 (Storey).

Immature.—Differ from adults in having the top of head, hinder half of neck, mantle and wing-coverts brown barred with rufous buff and black; lower back and upper tail-coverts buff, barred with black; crop and chest mottled with imperfect dusky bars. Kilimanjaro (Johnston).

The Long-tailed Shrike ranges from Dar-es-Salaam in German East Africa north to Barawa in south Somaliland and westwards in the interior to Kilimanjaro and Nairobi. From the coast Sir John Kirk kindly collected for me specimens at Dar-es-Salaam, its most southern known limit; also at Melinde and Lamu. Mr. Hunter obtained this Shrike on the Useri river and Mr. Jackson in Taita, and at Mashundwani, whence he writes: "Very plentiful everywhere. Found a nest with young birds in it in a thorn bush in September, 1885. Feeds chiefly on grasshoppers. Generally three or four together. Common also at Kilimanjaro." On this mountain Sir Harry Johnston collected specimens up to an elevation of 3,000 feet, and remarks: "They affect the desert and waterless districts at the foot of the mountain, perching on low shrubs and pouncing upon the grasshoppers which are very abundant in this district and form their principal food." Hildebrandt found the species at Mombasa and in Ukamba generally distributed but not abundant, and according to Fischer it is rare in the interior of Masailand, but he collected specimens in Little Arusha, at Kipini, Maurui, and in Wapokomoland, where they were most plentiful in the more mountainous parts and where he remarks that their note is a cackling "ae, ae." He also found the species on Lamu Island and at Barawa, on the south Somali coast, which is the most northern limit of its range.

Erlanger found this Shrike not uncommon in the trees of the oases in the green steppes along the Juba River in south Somaliland. In June when he was there the young birds

were in the nests and hardly fledged. Gurney found this bird not uncommon in the bush country of British East Africa. Specimens were obtained at Nairobi, on the Thika River, and at Kapiti. "It was generally seen in pairs, and was shy and not easily approached. I several times watched one as it sat on the outside branch of a tree, and from this elevated post made repeated flights, like a Drongo or Flycatcher, at some passing insect. On three different occasions I found dead lizards impaled on thorns: this may have been done by this or by the previous species, but *L. caudatus* was seen to fly from one bush on which lizards were impaled."

The egg is of a broad oval, somewhat pointed, and slightly glossy. It is creamy white, indistinctly spotted with yellowish brown and pale lavender grey, and measures 0.95×0.75 .

There are examples of this species in the British Museum from Dar-es-Salaam (Kirk), and Kilimanjaro (Johnston), in German East Africa; and from Ndi (Hildebrandt), Mombasa (Percival and Buxton), Melinde (Kirk), Lamu (Jackson), Kitui (Hildebrandt and Storey), and Machakos (Hinde), in British East Africa; in Tring I have examined an example from Umbugwe (Neumann) some distance south-west of Kilimanjaro. On account of the previous use of the name "*caudatus*" by Brehm, Hartert has recently renamed the species *Lanius cabanisi*.

Fiscus excubitorius.

Lanius excubitorius, Prév. et Des Murs in Lefebvre. Voy. Abyss., pp. 99, 170, pl. 8 (1850), *Abyssinia*; Gadow. Cat. B. M. viii. p. 253 (1883 pt.); Ogilvie-Grant, Nov. Zool. 1902, p. 469; Reichen. Vög. Afr. ii. p. 615 (1903 pt.); Ogilvie-Grant, Ibis, 1904, p. 266, *Hawash Valley* and *Aroussi*; Reichen. J. f. O. 1905, p. 427; Erlanger J. f. O. 1905, p. 702 *Shoa*; Schiebel, J. f. O. 1906, p. 172, pl. G, fig. 2.

Fiscus excubitorius, Shelley, B. Afr. i. No. 698 (1896 pt.).

Lanius excubitorius intercedens, Neumann, J. f. O. 1905, p. 228 *Hawash, Shoa*.

Subspecies a. Fiscus princeps.

Lanius princeps, Cabanis, Mus. Hein. i. p. 73 (1850) *Upper Nile*.

Lanius kiek, Vierth. Naumannia, 1852, p. 57, 1857, p. 103, pl. 2 *Upper White Nile, at 7° N. lat.*

Lanius macrocerus, De Filippi, Rev. et Mag. Zool. 1853, p. 290 *Upper White Nile*.

Lanius excubitorius (non Prév. et Des Murs), Ogilvie-Grant, Ibis, 1905, p. 201 *Uganda*; Neumann, J. f. O. 1905, p. 227 *Ankobo River*; Jackson, Ibis, 1906, p. 549 *Toro*; Ogilvie-Grant, Ibis, 1907, p. 590 *White Nile*.

Fiscus excubitorius, Butler, Ibis, 1905, p. 327, 1908, p. 225, 1909, p. 80 *Bahr el Ghazal*; Oates, Cat. B. Eggs, B. M. iv. p. 283, pl. xii. fig. 12 (1905).

Subspecies b. Fiscus böhmi.

Lanius schalowi, Böhm, J. f. O. 1884, p. 177 *Bogakatani, Tanganyika*.

Lanius böhmi, Reichen. J. f. O. 1902, p. 258; id. Vög. Afr. ii. p. 616 (1903), iii. p. 835 (1905).

Lanius excubitorius böhmi, Reichen. Deutsch. Zentr.-Afr. Exped. iii. p. 314 (1910).

Lanius intercedens, Ogilvie-Grant, Trans. Zool. Soc. xix. p. 344 (1910) *Ruvenzori*.

Adult male. Crown, back of the neck, back and tail-coverts pearl grey, with sometimes a little white on the rump; a broad black band covers the forehead and sides of the head, and extends down the sides of the neck; wings black, with a portion of the scapulars grey (but never white), and a broad white base to the primaries; axillaries and under wing-coverts black; tail black and white, the centre pair of feathers with the apical two-thirds black; the basal third white, the basal dark portion barred with brown, the outer five pairs, with only the apical fourth black, the black on the outer pair, averaging 0.5 to 0.75 of an inch; all the tail-feathers, except the central pair, with narrow white tips as well; chin, throat, chest, thighs, and under tail-coverts pure white. Iris brown, bill and feet black. Total length 11.2 inches, culmen 0.8, wing 4.8, tail 6.3, tarsus 1.2. Duhome, ♂, 25.2.02 (Degen).

The female only differs from the male in having a deep chestnut patch on the flanks. Wing 4.7. Billin, ♀, 21.1.02 (Degen).

Fiscus excubitorius princeps.—Birds from the Upper Nile valley differ from those from Abyssinia and Shoa in their smaller size; shorter tail and the greater amount of black on the tail-feathers, the black tip of the outer feather varying from 1.25 to 1.50 against 0.50 to 0.75. Wing 4.35 inches, tail 5.0. Kaka, White Nile, ♂, 5.3.01 (Hawker).

Fiscus excubitorius böhmi.—Birds from Tanganyika and north Nyasa-

land appear to be somewhat intermediate between the typical Abyssinian bird and those from the Nile valley. The amount of black on the outer tail-feathers averages about 1.0. Wing 5.0 inches, tail 5.5. N. of Lake Nyasa [♂], —. 9. 04 (A. Sharpe).

The Grey-backed Fiscal Shrike ranges over East Africa from Abyssinia and the Upper White Nile to the Nyasa-Tanganyika plateau. It varies a good deal in size, and it is possible to distinguish three races which may be considered as subspecies. There is a very good series in the British Museum, viz. :—

Lanius excubitorius excubitorius.—Abyssinia—Billin, on the Hawash River, and Duhome, Aroussa country (Degen), Philwaka (Lovat), Daimbi, in Shoa (Antinori), Lake Addo, in Shoa (Turin Mus.).

Lanius excubitorius princeps.—Kaka and Fashoda, on the White Nile (Hawker), Baro River (Zaphiro), Bahr el Ghazal (Bohndorff), Kawa Baja, Lake Chad district (B. Alexander), Lado (Emin), Magois country, near L. Rudolf (D. Smith), Baringo and Nakuro, in British East Africa (Delamere); Kibera, Butiaba (Jackson), and Ankole (Johnston), in Uganda; Ruwenzori (Ruwenzori Exped.).

Lanius excubitorius böhmi. — North of Lake Nyasa (Sharpe).

Mr. Butler writes: "I first met with this Shrike at Kaka in February, 1902. Then it was comparatively scarce, but in March I found it very abundant in the 'ambatch' cover, along the Bahr el Ghazal at the Jur River. I have seen it nowhere else. I do not think that this Shrike can be correctly retained in the genus *Lanius*. Its habits are so very different. It is highly gregarious, being almost always in parties, and these are not pairs of old birds accompanied by their last brood, but companies of as many as twelve or fifteen individuals. I have seen them dancing about all over a tree,

jerking their tails and fluttering their wings, more like Babblers than true Shrikes of the typical genus."

In Shoa this is an abundant species, for Antinori collected a dozen specimens at Kagima and Daimbi in April. He noticed them also in parties of eight to twelve individuals, flying from one tree to another, and screaming "tiri tiri tiri."

Woosnam found this Fiscal very numerous all through the acacia country round the south end of Ruwenzori, and in the upper part of the Semliki valley. It was a conspicuous object, even from a distance, perched on the topmost branch of an acacia tree, or flying, as is their habit in a perfectly straight line from one tree to another. Its low note has a curiously musical sound, like several notes in harmony. In its more southern range, to the east of Lake Tanganyika, it was found by Böhm at Boga Katani, and named *L. schalowi*; this was altered later by Reichenow owing to preoccupation to *L. böhmi*. The most southerly point of its range appears to be at the north end of Lake Nyasa, where in September, 1904, Sir Alfred Sharpe collected five specimens.

Genus IV. LANIUS.

Bill robust, short, much compressed, strongly hooked and toothed; nostrils basal, nearly round, closed by an arched membrane and partly concealed by the frontal feathers; rictal bristles numerous; wings moderate, the third and fourth quills about equal and longest; the first either shorter than the coverts or longer and about half the length of the second; tail moderately long and graduated, sometimes longer, but never twice the length of the wing. Tarsi stout, scutellated in front, posteriorly with two laminated plates; claws sharp and hooked. Plumage black, white and grey; sexes more or less alike, never distinguished by the chestnut flank-patch.

Type.

Lanius, Linnæus, Syst. Nat., ed. 10, i. p. 93 (1758) . . . *L. excubitor*.

This is the typical and most widely distributed genus of the family, ranging over Africa, Europe, Northern Asia, India, and the northern part of America. Its members are all very similar in habits, mostly migratory, and have a strikingly characteristic plumage, all being grey above with the greater

portion of the wings and tail black and the entire under parts white, with an occasional grey or rosy shade. Eight species are here recognized; five of these are little more than geographical races of the widely spread and well-known *Lanius excubitor* of Europe, and their inter-relations and breeding ranges are not yet by any means satisfactorily settled.

KEY TO THE SPECIES.

- a. Outer primary short, barely extending beyond the primary coverts. *minor*.
- b. Outer primary much longer, about half the length of the second.
 - a¹. No trace of rufous brown on the rump or tail-feathers
 - a². Scapulars always with some white.
 - a³. Wing speculum extensive, the white on the basal part of the primaries extending about an inch beyond the coverts.
 - a⁴. Larger wing over 4·10; no white on the rump.
 - a⁵. Underparts washed with grey; 5th pair of tail-feathers usually with a good deal of black *aucheri*.
 - b⁵. Underparts washed with rosy no grey; outer and 5th pair of tail-feathers almost completely white; bill pale *pallidirostris*.
 - c⁵. Underparts pure white; outer and 5th pair of tail-feathers almost completely white; bill black *elegans*.
 - b⁴. Smaller, wing under 4·0, rump and upper tail-coverts white; breast white *leucopygos*.
 - b³. Wing speculum reduced, white on the basal part of the primaries extending only about 0·5 inch beyond the coverts *uncinatus*.
 - b². Scapulars without white *lubberti*.
 - b¹. Rump and upper tail-coverts and the white portion of the tail-feathers washed with rufous *bogdanowi*.

Lanius aucheri.

- Lanius aucheri*, Bonaparte, Rev. Mag. Zool. 1853, p. 294 *Persia*.
Lanius excubitor aucheri, Hartert, Vög. pal. Fauna i. p. 420 (1907);
 Zedlitz, J. f. O. 1910, p. 804 *Dahlak Island* and *Cheren*.
Lanius fallax, Finsch, Trans. Zool. Soc. vii. p. 249 pl. xxv. (1872)
Bogosland; Gadow Cat. B. M. viii. p. 247, pl. 8 (1883); Reichen.
 Vög. Afr. ii. p. 318 (1903); Erlanger, J. f. O. 1905, p. 702 *Zeila*.
Lanius pallidirostris [pt] Ogilvie-Grant, Nov. Zool. 1902, p. 459.

Adult.—Front of forehead, region of eyes and the ear-coverts black; crown, hinder half of neck, back and upper tail-coverts pearl-grey; tail black with the base and ends of all but the centre two feathers white, the white increasing in amount to the outer pair, which are white with only a little black along the shaft, the fifth pair with a black shaft stripe and usually with black on the inner web as well; scapulars grey with the outer half towards the secondaries white; wings mostly black with the least coverts mingled grey and black; quills with some terminal white margins, broadest on the secondaries, and broad white bases to the primaries; axillaries and under wing-coverts white, with a dusky patch next to the primaries; cheeks below the gape and the under-parts generally white, with a distinct wash of grey on the breast and flanks. Iris brown; bill and feet black. Total length 9·3 inches, culmen 0·8, wing 4·15, tail 4·2, tarsus 1·1. Annesley Bay, ♀, 1. 2. 68 (Blanford).

The sexes are alike; the male is a little larger, wing 4·2 to 4·3.

Aucher's Grey Shrike ranges from the eastern shores of the Red Sea and the neighbouring highlands of Abyssinia eastwards into Arabia, Palestine, Persia and Beluchistan. Blanford found it abundant on the shores of Annesley Bay in January and February and again in August near Massowah, and thought it was migratory. Erlanger obtained the species further south at El Hota in December and at Zeila in January. Finally Zedlitz found it abundant and breeding on Dahlak Island in the Red Sea. There it perches on buildings and thorn trees, and at least one pair were found inhabiting every acacia. Completed nests were met with as early as February 13, while the male was sitting close by and singing like the European species, and Zedlitz did not doubt that it was a breeding bird on the island. He obtained an example at Cheren, inland in the Anseba valley, where he believed it to be only a winter bird or a transient.

In addition to the types of *L. fallax* and two of the specimens obtained by Blanford at Annesley Bay and Ain, the British Museum contains a fine series of this species from various localities in southern Arabia from Aden to Muscat,

collected by Yerbury, Percival and Dodson, Hawker and Colonel Miles: also a series from Palestine (Tristram), two from Beluchistan (Blanford), and the co-type of *L. aucheri* from Persia.

In the Tring Museum there are examples from various localities in Eritrea taken only in winter (November to January), and one from the Suakim District, in addition to a large series from Palestine, Persia, Beluchistan and Arabia.

Lanius pallidirostris.

Lanius pallidirostris, Cassin, Proc. Acad. Philad. v. p. 244 (1852), and Journ. 2nd ser. ii. p. 257, pl. 23, fig. 1 *Eastern Africa*; Ogilvie-Grant, Nov. Zool. 1902, p. 459; Koenig Ber. V. Intern. Orn. Kongr. 1910, p. 512 *Sudan*.

Lanius excubitor pallidirostris, Hartert, Vög. pal. Fauna i, p. 429 (1907); Zedlitz, J. f. O. 1910, p. 804 *Eritrea*.

Lanius assimilis, Brehm, J. f. O. 1854, p. 146 *Senaar*; Gadow, Cat. B. M. viii. p. 249 (1883); Butler, Ibis, 1907, p. 590 *Khartum*; Reichen. Vög. Afr. ii. p. 619 (1903).

Lanius pallidus, Antinori, Cat. descr. Coll. Uccell. p. 56 (1864) *Gaderef*.

Lanius grimmi, Bogdanow, Faun. Zapiski Imp. Nauk. xxxix. p. 151, Taf. iv. (1881) *Central Asia*.

Lanius dealbatus (non Defilippi) Ogilvie-Grant, Ibis, 1904, p. 266 *Buggali*.

Description. Of the same general appearance as *L. aucheri*, but the under parts white tinged more or less noticeably with rosy, never any grey; white on the wings much as in *L. aucheri*; tail with the outer (sixth pair) of rectrices white, except for a partially black shaft, fifth pair white except for the shaft and a narrow band along the inner web next the shaft, third and fourth tipped with white, first and second with only a very narrow white tip; under wing-coverts usually pure white but sometimes a trace of the grey patch on the primary under-coverts; bill horny and pale (occasionally black). Length 8.75 inches, culmen 0.65, wing 4.25, tail 4.0, tarsus 0.9. *Khartum*, ♂, 11. 1. 04. (Zaphiro.)

A young bird has the back an earthy-grey; the black face-band hardly reaches in front of the eye and the bill is a paler brown.

This form of the Grey Shrike, so far as our present information goes, winters in the Upper Nile valley and perhaps in

southern Abyssinia. In spring it migrates north-eastwards to the steppes of the Transcaspian region, where it breeds.

The British Museum has examples from Khartum, January (Zaphiro), Sudan (Dunn), Nubia (Verreaux), Assouan February (Hawkshaw) and Kordofan (Pethewick), and there is a young shrike from Buggali in the Aroussi country of south Abyssinia obtained March 3 by Degen, which I believe to be referable to this form. At Tring there are examples from Shendy (March) and Schereik (January), on the Nile, and a young bird from Gallaland, as well as a series from Persia, Transcaspia and Beluchistan. Brehm states that it comes to Senaar on the Blue Nile in October, and stays till spring feeding on beetles, cockroaches and other insects which abound there at that time. Zedlitz obtained a Grey Shrike which he identified with this form at Asmara in Eritrea in March.

Koenig, during his recent journeys up the Nile, obtained a pair of males at Djebel Anel, not far from south of Khartum on February 16, 1910, as well as another some years previously at Tangasi, north of Khartum.

Lanius elegans.

Lanius elegans, Swainson, Fauna Bor.-Amer. ii. p. 122 (1831) *Fur countries!*; Gadow, Cat. B. M. viii. p. 251, pl. vii. (1883).

Lanius excubitor elegans, Hartert, Vög. pal. Fauna, i, p. 427 (1907).

Lanius hemileucurus, Finsch and Hartl. Vög. Ost-Afr. p. 329 (1870) *Algeria*.

Lanius leuconotus (non Brehm), Butler, Ibis, 1908, p. 225, 1909, p. 394 *Port Sudan*.

Description.—*Adult*. Of the same general size and appearance as *L. aucheri* and *L. pallidirostris* with a pale pearly grey back, and without any white on the rump, but the under parts pure white, neither grey nor rosy, and with the two outer pairs of tail-feathers almost entirely white, the penultimate pair with sometimes a little dusky along the shaft; the amount of black on the secondaries varies, as a rule the inner web is quite white and the outer black with a white tip. Length about 9·0 inches, wing 4·25, tail 4·30, culmen 0·55, tarsus 1·1. Type (Hudson Bay Company).

This species was founded by Swainson on a Shrike presented to the British Museum, by the Hudson Bay Co., presumed to have been obtained in their territory in North America. It is, however, no doubt identical with a form of *L. excubitor* common in North Africa from Tunis to Egypt, where Mr. Michael Nicoll has found it breeding in several localities, and has traced it as far south as Luxor.

Mr. Nicoll further informs me that he has examined the Shrikes found breeding by Butler near Port Sudan on the Red Sea coast, and that they are undoubtedly examples of this species, which must therefore be included in the fauna of the Ethiopian region as defined for the purpose of this work.

Butler writes that he found this species common at Suakim in March, 1906. Two years later he noticed the same Shrikes daily throughout the month of May at Khor Arbat, a spot about 25 miles inland from Port Sudan, and on the 16th found a nest containing four young, placed about 4 ft. from the ground in a "Marakh" bush (*Leptadenia spartium*).

Lanius leucopygos.

Lanius leucopygos, Hemprich and Ehrenberg, Symb. Phys. fol. dd. e. (1828); *Dongola*.

Lanius excubitor leucopygos, Hartert, Vög. pal. Faun. i. p. 428 (1907).

Lanius pallens, Cassin, Proc. Acad. Phil. v. p. 245 (1852); and Journ. Acad. Phil. 2nd ser. ii. p. 258, pl. 23, fig. 2 (1853) *Fazogloa*, *Blue Nile*; Reichen. Vög. Afr. ii. p. 619 (1903).

Lanius dealbatus, Defilippi, Rev. Mag. Zool. 1853, p. 289 *Upper White Nile*; Gadow, Cat. B. M. viii. p. 250, pl. vi. (1883); Witherby, Ibis, 1901, p. 251 *White Nile*; Rothschild and Wollaston, Ibis, 1902, p. 14, *Shendi*.

Lanius leuconotus, Brehm, J. f. O. 1854, p. 147 *Blue Nile*; Butler, Ibis, 1905, p. 327, *Khartum*.

Lanius orbitalis, Lichtenstein, Nomencl. Av. Mus. Zool. Berol. p. 12, (1854).

Adult. Crown and back pearl-grey, a conspicuous black band on the side of the head, through the eye and ear-coverts joining its fellow as a narrow

but distinct frontal band over the bill; rump and most of the tail-coverts white; wings black and white, the primaries with the basal half white forming a conspicuous speculum, the inner secondaries white on the inner web and tip, the black mainly confined to a streak on the outer web along the shaft; tail with the outer pair of rectrices entirely white, the fifth pair chiefly white, sometimes with a little black patch on the inner web and a black shaft; below pure white, no grey or rosy; axillaries and under wing-coverts white. Iris brown; bill and feet black. Length about 9.0, culmen 0.6, wing 3.95, tail 4.35, tarsus 1.0. Senaar (Kotscky).

The white rump, pure white under parts and large amount of white on the tail and secondaries, and small size at once distinguish this species.

The White-rumped Shrike is found in the Upper Nile valley from Dongola upwards to Kordofan and Sobat, on the White Nile, and to Roseires on the Blue Nile, where it seems to be a resident; from the Nile its range appears to extend westwards to the Lake Chad district. Here three typical examples were procured by Alexander at Yo, October 8, at Damakuldie, November 23, and at Mongamin, November 28, 1905. The type is said to have come from Dongola, and Butler has taken examples at Khartum in February. He writes: "This conspicuous Shrike is fairly common and of wide distribution. I find from my notes that I met with it almost daily between September 7 and May 11, from the Setit across to western Kordofan, and up the Nile as far as the Sobat Junction. During the remaining months of the year I have generally been away, but as it was not to be seen at Khartum just before the first week in September, and then became suddenly abundant, I had formed the idea that it was a migrant, and did not breed in the country. However, on March 31, 1904, at the Mazrub Wells in western Kordofan, I came on two bob-tailed young birds sitting on a thorn 'zariba,' and watched the parents feeding them for some time. This Shrike is quite at home in any desert where there are thorn-bushes for it to settle on, and along stretches of fifty and seventy miles without water I have noticed it the whole way."

Witherby during his journey up the White Nile found it nowhere common, and generally met with singly and rather wild. Wollaston, who obtained two males at Shendy, states that in February he saw no signs of breeding, and that the birds were single.

I have only been able to find two examples of this species in the British Museum, the one now described, and another labelled simply "North Africa," but I have seen the types of Brehm's *L. leuconotus* in the Tring Museum, as well as Wollaston's examples from Shendy, and an additional one obtained later at Naikhala on the Atbara River in February, and one from Wad Marim, near Khartum, obtained on May 13, by Witherby.

Lanius uncinatus.

Lanius uncinatus, Selater and Hartl. P. Z. S. 1881, p. 168, fig. i. Socotra; Gadow, Cat. B. M. viii. p. 245 (1883); Shelley, B. Afr. i. No. 703 (1896); Grant, Nov. Zool. 1902, p. 460, pl. 27, fig. 12; Ogilvie-Grant and Forbes, Nat. Hist. Socotra, p. 38 (1903); Reichen. Vög. Afr. ii. p. 620 (1903).

Adult male. A narrow band on the forehead, about .1 inch wide, and sides of head, from the upper mandible to the end of the ear-coverts, black crown, hinder half of neck, back, upper tail-coverts and the scapulars pearl-grey, the latter fading into white towards the inner secondaries; wings mostly black with the least coverts grey; some white terminal edges to the secondaries and inner primaries; primaries with the white speculum of the wings much reduced, the white at the base of the quills only extending about .5 inch beyond the greater coverts; under wing-coverts with a patch of silvery-grey; inner edges to the quills whitish; axillaries greyer with white edges; tail with the outer pair of feathers white with a dark shaft stripe widening at the base, fifth pair with a slightly broader shaft stripe, central pair entirely black; lower portion of cheeks and the under parts generally white tinged with grey on the lower throat, chest and sides of body. Iris brown; bill and feet black. Total length 9 inches, culmen 0.8, wing 3.9, tail 3.9, tarsus 1.1. Type, Socotra, ♂, 16. 2. 80 (Balfour).

The female is similar, but perhaps averages slightly smaller.

A young bird (with wings and tail hardly full grown) has the upper parts washed with earthy-brown, including the tips of the inner secondaries; the breast and sides of the body somewhat mottled with the same colour; the

bill and legs pale horny. Jena Agahan, Socotra. ♀ juvenile, 12. 1. 99 (Ogilvie-Grant and Forbes).

The Socotran Grey Shrike is confined to the Island of Socotra, where it was discovered by Professor J. B. Balfour in 1880. He collected nine examples of the species, eight of which, including the type, are now in the British Museum. He writes: "A very solitary bird. Found in those parts of the island where there are trees. None at the eastern extremity, nor on the Najad plain on the south side. Females I had some difficulty in getting. The male perches on the top of branches of the trees, and there utters a melodious note. Nom. vulg. 'Tavifi.'"

Mr. Ogilvie-Grant, who also collected on the Island of Socotra, gives the following account: "We met with the Sokotran Shrike in all parts of the island visited, and finding it as a rule extremely tame, had no difficulty in obtaining as many specimens as we wanted. At Homhil I found a nest in a *Boswellia* tree containing quite young birds, but probably this was an exceptionally late brood, as it was the only nest we found occupied. The general habits do not seem to differ perceptibly from those of the common Red-backed Shrike. On one occasion our taxidermist, Mr. Cutmore, having shot a dove and failed to find it, visited the same place next morning. He found his bird transfixed on an acacia thorn, and a shrike sitting beside it. One curious custom of this bird was its habit of feeding late in the evening. When watching for the little Scops Owl at dusk, I often saw it busily engaged in catching beetles among the neighbouring bushes. The male has a harsh, rather mournful song, impossible to reproduce, and the usual call-note frequently uttered from the tops of bushes sounds like 'clink clink.'"

Lanius lübberti.

Lanius lübberti, Reichen. Orn. Monatsb. 1902, p. 76 *Damaraland*; id. Vög. Afr. ii. p. 619 (1903).

Adult. Above, including the scapulars and upper tail-coverts, pale grey, the latter no paler than the back; a black band along the sides of the head from the lores to the ear-coverts; above which is a clearly marked white eye stripe; wings chiefly black, the primaries white at the base, the inner primaries and secondaries with narrow white tips; below white, breast and sides washed with salmon; under wing-coverts white, the outer ones grey; middle tail-feathers black with narrow white tips; the following ones white at the base and tips, the outer ones quite white; bill black, paler at the base of the lower mandible; feet black. Length about 8.25 inches, wing 4.5 to 4.7, tail 3.95, bill 0.65, tarsus 1.0 (Reichenow).

The absence of white on the scapulars and the black frontal band seem to distinguish this species from *L. fallax* and *L. pallidirostris*, to which it is most nearly allied.

Lübbert's Grey Shrike is known from Damaraland only; it was described from an example obtained at Brakwater by Dr. Lübbert. There is no example in the British Museum.

Lanius minor.

Lanius minor, Gm. S. N. i. p. 308 (1788); Dresser, B. Eur. iii. p. 393, pl. 149 (1873); Gadow, Cat. B. M. viii. p. 235 (1883); Shelley, B. Afr. i. No. 704 (1896); Stark and Selater, Bds. S. Afr. ii. p. 9 (1901); Grant, Nov. Zool. 1902, p. 470; Hartert, Nov. Zool. 1902, p. 621 *Escarpment, B.E.A.*; Reichen. Vög. Afr. ii. p. 616 (1903); Erlanger, J. f. O. 1905, p. 701 *Harrar*; Schiebel, J. f. O. 1906, p. 169, pl. F. figs. 2, 3; Stoehr and Selater, Journ. S. Afr. Orn. Union, ii. p. 94 (1906) *Zambesi*; Hartert, Vög. pal. Fauna, i. p. 416 (1907); Sheppard Journ. S. Afr. Orn. Union, v. p. 28 (1909) *Beira*; Chubb, Ibis, 1909, p. 160 *Bulawayo*; Gurney, Ibis, 1909, p. 499 *Kallima Theki, B.E.A.*; Neave, Ibis, 1910, p. 226 *Katanga*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 116 (1910).

Lanius italicus, Lath. Ind. Orn. i. p. 71 (1790) *Europe*.

Lanius vigil, Pall. Zoogr. Rosso. As. i. p. 403 (1827) *S. Russia*.

Lanius flavescens, Hempr. and Ehr. Symb. Phys. i. fol. e. (1828) *nom. nud.*

Lanius medius and *nigrifrons*, Brehm, Vög. Deutsch. p. 236 (1831) *Germany*.

Lanius pinetorum and *eximius*, Brehm, Isis, 1842, p. 652 *Germany*.

Lanius longipennis, Blyth, J. A. S. Beng. 1846, p. 300.

Lanius roseus, Bailly, Orn. Savoie, ii. p. 26 (1853).

Lanius græcus, Brehm, Vogelfang, p. 84 (1855).

Adult male. Forehead, front of crown and sides of head above the gape to the ear-coverts jet black; remainder of crown, back half of neck, back, scapulars and upper tail-coverts uniform pearl grey; tail, with the two centre feathers entirely black, the other with the basal third and the ends white, the amount of white rapidly increasing towards the two outer pairs of feathers, which have their entire webs pure white; wing mostly black, with a wash of grey on the least coverts, broad white bases to the primaries and some white terminal edges to the quills; under wing-coverts pure white with a dusky patch next to the primaries; axillaries greyish white; lower cheeks and under parts generally white, with a rosy tinge on the front and sides of the breast most conspicuous in freshly moulted birds. Iris brown; bill dark brown, much paler at the base of the lower mandible; feet black. Total length 8.2 inches, culmen 0.75, wings 4.8, tail 4.0, tarsus 1.0. Kroonstad, ♂, 24. 3. 85 (Symonds).

Adult female. Differs in having less black on the head and the breast less rosy.

Immature. Differs in the upper parts being pale earthy brown, which colour extends over the forehead and lores; the black of the tail extends on to the inner web of the penultimate feather; breast white with no rosy shade. Elephant Vley, 11. 11. 59 (Andersson).

This species at any stage of plumage can be always recognized by its very short outer primary which barely extends beyond the primary coverts.

The Lesser Grey Shrike ranges over eastern and southern Africa in winter months, but has not been recorded in the western half of Tropical Africa from further north than the Congo River. It breeds in middle and southern Europe and western Asia and ranges northwards to Turkestan and the Altai Mountains.

Like the generality of Shrikes, they are bold and pugnacious, and although strong and active on the wing usually take but short flights. As a rule they are to be met with, perched on an exposed bough watching for the passing insects, but sometimes they will hover in the air or glide like a bird of prey in pursuit of their quarry; they also occasionally feed upon fruit. They breed in Europe about May; the nest is

cup-shaped, large and solidly constructed of twigs, roots and grass, occasionally adorned on the outside with green leaves and fresh flowers, and is lined internally with seed-down, wool, horse-hair and feathers. The eggs, five to seven in number, are of a pale bluish green with some specks and blotches of greenish brown (Seeböhm, Brit. B. pl. 11, 1885), and measure about 1·0 inch by 0·8.

These Shrikes have been procured in Tropical and south Tropical Africa, almost invariably between the months of October and April, and are undoubtedly on migration or wintering. Petit obtained the species at Condé in Portuguese Congo, in December. Chapman first recorded the species from South Africa as not uncommon in Damaraland at certain seasons, and Andersson also remarks that it is very common there during the rains from November to April, but most leave the country on the return of the dry season, although he believed that a few remain there throughout the year. He also remarks: "A great number of these birds are often found in a very limited space and not unfrequently on the same tree." Its most southern known range is Kroonstad in the Orange River Colony, where Mr. Symonds obtained one example on March 24, and at Komatipoort in the Transvaal (Francis). Two specimens killed by Oates at Tati in Bechuanaland on November 19 are in the British Museum. Sheppard found it not uncommon near Beira; it was generally seen sitting on the stump of a dead tree picking up beetles and other insects. Stoehr and Neave have both met with it in Katanga and northern Rhodesia, and there are two examples from Nyakowa, north-west of Lake Nyasa, killed in March, and sent to the British Museum by Sir Alfred Sharpe. It is generally distributed over German and British East Africa (Kilimanjaro, Sjöstedt; Escarpment, Doherty; and Kallima Theki, Gurney), while Erlanger met with it at Harar in Shoa on April 28, where he found it numerous but shy.

In the British Museum, in addition to those already mentioned from Tati, Kroonstad, Condé and Nyakowa, there is a good series from Otjimbingue, Ondonga and Elephant Vlei, in German South-west Africa, taken by Andersson between November 11 and April 5.

Lanius bogdanowi.

Otomela bogdanowi, Bianchi, Bull. Acad. Imp. Sci. Pétersbourg, xxx. p. 514 (1886) *Astrabad*.

Lanius bogdanowi, Hartert, Vög. paläarkt. Fauna, i. p. 448 (1907).

Lanius raddei, Dresser, Proc. Zool. Soc. 1888, p. 291 *Kulkulais in Transcaspia*; id. Ibis, 1889, p. 89, pl. v.; Neumann, J. f. O. 1900, p. 266 *Umbugwe*; O. Grant, Nov. Zool. ix. p. 472 (1902); Reichen. Vög. Afr. ii. p. 625.

Lanius dichrous, Menzb. Ibis, 1894, p. 362 *Kenderlik River*.

Lanius elaeagni, Suschkin, Bull. Soc. Imp. Nat. Moscow, 1895, p. 41, *Emba River on the Khirghis Steppes*.

Lanius infuscatus, Suschkin, Ann. Mus. St. Petersb. 1896, p. 40, *Kenderlik River*.

Lanius phoenicuroides pseudocollurio, Suschkin, Bull. Brit. Orn. Club, xvi. p. 60 (1906) *Altai*.

Adult male. Crown and nape grey shading to white on the forehead and supercilium, a black band from the ear-coverts through the eye sometimes continued narrowly across the forehead; back and rump greyish brown; upper tail-coverts rusty brown; under parts white, the sides of the breast and throat washed with pinkish buff becoming tawny on the flanks; wing brownish black, the coverts and secondaries rather widely edged with pale rufous buff; basal portion of the primaries white, forming a small speculum; tail as in *L. collurio* with the central pair of feathers black, the outer pairs black with white bases increasing towards the outermost; but with the white strongly tinged with rufous. Length 7·0 inches, wing 3·75, tail 3·2, tarsus 0·95.

Radde's Shrike breeds in central Asia, in northern Persia, Transcaspia, and the western Altai.

Oscar Neumann obtained a single male example, not yet moulted, at Umbugwe, in German East Africa, on November 15, 1893, and this constitutes the only African record. It may be presumed that Radde's Shrike winters occasionally in East Africa.

Genus V. ENNEOCTONUS.

*Type.*Enneoctonus, Boie, Isis, 1826, p. 973. *E. collurio*.

This genus has for its type *E. collurio*, the Red-backed Shrike, which migrates from the Palaearctic Region south through eastern and southern Africa. It also includes a closely allied resident African form which, as is so often the case, has a more rounded wing than the migratory species. The members of this genus have the mantle and scapulars rufous, and in the adult males the crown and nape is grey. They differ from the females, which rather resemble the young birds and have a somewhat barred plumage. In all structural characters they resemble *Lanius*.

KEY TO THE SPECIES.

- a.* Larger; wing 3·5 or over; without a white speculum. . . *collurio*.
b. Smaller; wing under 3·5; a white speculum on the wing . . *gubernator*.

Enneoctonus collurio.

- Lanius collurio*, Linn. Syst. Nat. 10th ed., p. 94 (1758); 12th ed. i. p. 136 (1766); Dresser, B. Eur. iii. p. 399, pl. 150 (1871); Gadow, Cat. B. M. viii. p. 286 (1883); Ogilvie, Grant, Nov. Zool. 1902, p. 471; Hartert, *ibid.* p. 621 *Escarpment, B.E.A.*; Reichen. Vög. Afr., ii. p. 622 (1903); Butler, Ibis, 1905, p. 328, *Khartum*; Erlanger, J. f. O. 1905, p. 702 *Harrar*; Stoeck and W. L. Slater, J. S. Afr. Orn. Union, 1906, p. 94 *N.E. Rhodesia*; Hartert, Vög. pal. Fauna, i. p. 439 (1907); Swynnerton, Ibis, 1907, p. 46, 1908, p. 48 *Gazaland*; Haagner and Ivy, J. S. Afr. Orn. Union, 1907, p. 88 *Albany*; Chubb, Ibis, 1909, p. 161 *Bulawayo*; Gurney, Ibis, 1909, p. 499 *Brit. E. Afr.*; Taylor, J. S. Afr. Orn. Union, 1909, p. 85 *Knysna*; Sheppard, *t.c.* p. 29 *Beira*; Neave, Ibis, 1910, p. 226 *Congo Free State*; Bannerman, Ibis, 1910, p. 303 *N. Somaliland*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 116 (1910); Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 315 (1910).
- Enneoctonus collurio*, Shelley, B. Afr. i. No. 709 (1896); Clarke, Ibis, 1904, p. 526 *Natal*; Jackson, Ibis, 1906, p. 550 *Uganda*; Neave, Manch. Mem. li. No. 10, p. 72 (1907); *N. E. Rhodesia*.
- Lanius varius*, Gmel., Syst. Nat. i. p. 301 (1788).
- Lanius spinitorquus*, Bechst. Nat. Deutsch. ii. p. 392 (1791).
- Lanius dumetorum*, Brehm Vög. Deutsch. p. 234 (1831) *Germany*.
- Lanius tenuirostris* and *musicus*, *Thuringia*; *L. gracilis* and *brachiuros*, *Cape of Good Hope*, Brehm, Isis, 1842, p. 665.

Lanius anderssoni, Strickl. and Selat. in Jard. Contr. Orn. 1852, p. 145 (1853) *Damaraland*.

Lanius æruginosus, Heugl. Orn. N. O. Afr. p. 474 (1871).

Lanius affinis (non Legge) Fisch. and Reichen. J. f. O. 1884, p. 261 *Lindi*, *D. O. A.*

Enneoctonus reichenowi, Shelley, Bull. B. O. C. iii. p. 42 (1894); id. B. Afr. i. No. 710 (1896) *Lindi*.

Adult male. Forehead and sides of head above the gape black; crown and hinder half of neck clear grey, slightly darker on the neck and fading into white next to the black on the forehead and region of the eyes; mantle and wing-coverts bright cinnamon, and very narrow cinnamon outer edges to the other wing feathers, excepting the inner secondaries, which are mostly of that colour, with whitish terminal margins; inner edges of quills, axillaries and under wing-coverts white, the latter with a dusky patch next to the primaries; the back gradually shades into clear grey on the lower half and upper tail-coverts; tail, with the two centre feathers entirely black, the next pair are black, with a small white patch on their inner webs near the base; the remaining four pairs of feathers have their basal two-thirds entirely white, and white terminal margins, extending down on the outer pair only, over the entire exterior webs; under parts pale pink fading into white towards the chin, lower abdomen, thighs and under tail-coverts; and into a deeper and more cinnamon shade on the flanks. Iris brown; bill horny black fading into yellowish flesh-colour towards the gape and basal half of lower mandible, but changing into black like the feet about the month of April. Total length 7·0 inches, culmen 0·6, wing 3·55, tail 3·0, tarsus 0·95. Durban, ♂, 27. 3. 74 (Shelley).

Adult female. Top of head and hinder half of neck brownish grey, with a more rufous shade on the crown, fading into buff on the front of forehead and lores; ear-coverts rufous, mantle and lesser wing-coverts greyish rufous, edges of the other feathers of the wing dull rufous inclining to buff on the inner secondaries which have white ends; lower back and upper tail-coverts slightly greyer than the mantle; tail rufous tinted brown with white terminal margins extending over the outer webs of the exterior pair of feathers; under parts buff with concentric dusky black bars on the sides and base of throat, chest and flanks. "Iris dusky; bill light ashy brown, darker on culmen and tip; tarsi and feet dusky ash" (T. Ayres). Wing 3·6 inches. Senafé, ♀, 25. 4. 68 (Jesse).

Immature. Similar to the adult female, but with the crown, rump and tail more rufous and the upper parts more barred.

Our common Red-backed Shrike ranges over eastern and southern Africa generally; it is absent from west Africa to the north of the Quanza River; but is widely distributed over

Europe and western Asia, from spring to autumn, ranging from the Pyrenees to Transcaspia and north Persia. Mr. Dresser, in his "Birds of Europe," writes: "The Red-backed Shrike arrives in Europe in April or early in May, remains to breed, and leaves again in August for a more genial climate"; and with regard to the breeding: "The nest of the Red-backed Shrike is large for the size of the bird, and is composed of straw, moss and dry bents, carefully lined with wool, fine moss and horsehair. It is generally placed in a large bush, seldom above four or five feet from the ground. The eggs, from five to six in number, are subject to considerable variation in colour and markings. They are of a pale bluish or salmon colour with spots of brown, red and grey, mostly congregated in a zone near the thick end."

This Shrike is a common bird throughout South Africa from November to March to as far north as Benguella on the west coast, but apparently never occurs in the West African Subregion to the north of the Quanza, which river often forms the barrier between South and West African species. In Benguella, according to Anchieta, it is known to the natives at Biballa as the "Kitiati," and by those of the Humbe district as the "Kissanda-suala" (Leaf-scatterer). Andersson informs us that it is pretty common in the Okavango region, Damara and Great Namaqualand, where, he believed, it breeds. One of his specimens, the type of *L. anderssoni*, is in the Cambridge Museum. Layard writes: "Levaillant states that this well-known European species inhabits the country about the Sunday and Zwartkops River (Port Elizabeth), Little and Great Namaqualand and other places, but is not found near Cape Town. We ourselves met with it about Graham's Town and Blinkwater, Alice, Elands Post and Katberg; young birds were common in the months of March and April."

Stark and Selater, in their work on the birds of South

Africa, write: "Certain females occasionally assume the garb of the male, as is the case with some other birds, but this 'freak' does not appear to be connected with age or want of reproductive power." They further remark that the majority of the birds seen in South Africa, from November to March, migrate through Eastern Africa and the Nile Valley into Europe, for they have not been detected crossing to or from Europe at the Straits of Gibraltar. A certain proportion, however, remain in Africa throughout the year, but its migrations do not extend to the immediate neighbourhood of Cape Town." In Natal, near Durban, during the whole of the time I remained there, from the middle of February to the middle of April, the Red-backed Shrike appeared to me to be equally plentiful, and about as abundant as the Fiscal Shrike was at Cape Town; and Mr. T. Ayres remarks that in Natal it is tolerably abundant the whole year round. Mr. Guy Marshall informs us that they arrive in Mashonaland in October, breed there, and depart again in April. During the nesting season the male is in the habit of impaling insects, small reptiles, and even young birds, with the object apparently of supplying the sitting female or the young, for the captured insects are not usually killed; and this peculiar habit, so common to the Shrikes, is, I believe, confined, or nearly so, to the breeding season. In Gazaland, during the summer, Mr. Swynnerton records it as more abundant than *Fiscus collaris*; and his natives brought him a number of immature birds in February and March. The crops examined contained beetles, grasshoppers, larvæ (both coleopterous and lepidopterous), a spider, and a small bug.

Chubb states that it is a common bird near Bulawayo from November to March, and that it is generally seen perched in some conspicuous position on a thorn-bush. He

states that a nest was found near Bulawayo on January 29. It was built in a thorn tree about 4 ft. from the ground, and contained three white eggs with small black markings.

If this observation, and those of Andersson and Marshall, are correct the Red-backed Shrike is undoubtedly double brooded like the Bee-eater (*Merops apiaster*).

North of the Zambesi it was noticed by Neave in November on the Alala plateau, and also on the Lufupa on the borders of north-west Rhodesia, and the Congo Free State in October. In Nyasaland Whyte procured the species at Zomba in March, and at Lake Shirwa in December. Dr. Stuhlman obtained it at Quilimane in March, and Senhor Serpo Pinto at Ksango, where he informs us the natives call it "Hiré."

The German collectors, Böhm, Stuhlman, and Fischer, have obtained it in many localities in German East Africa between October and April; and the same is the case with Jackson, Percival, Hinde, and Lord Delamere in British East Africa and Uganda. In the Upper White Nile valley it was collected by Emin, and at Khartum Butler states that it is a common winter bird, arriving from the north early in September; and that the immature birds greatly outnumber the adults. There are examples from this region in the British Museum, one from Wad Medina on the Blue Nile, killed September 20, and another from Bara, dated October 18, both obtained by Captain W. H. Dunn.

Von Heuglin records it as occurring along the White Nile and the Ghazal River, as well as in Abyssinia and the islands of the Red Sea. Blanford only obtained one example at Amba on the Samhar Coast in August, and Jesse, one at Senafe on April 25.

In Somaliland Erlanger noticed it abundant near Harrar and Ginir Ganale in April, but found it very shy; and Bury obtained it at two localities in the same country, Dubar, May 11, and Waghar, September 16.

In Egypt, as I wrote in 1872, this bird comes early in August on its way south, and returns again in March or April, but is never plentiful.

Most of the evidence seems to point to this bird being only a winter visitor to Africa.

Enneoctonus gubernator.

Lanius gubernator, Hartl. Orn. Centralbl. 1882, p. 91, pl. 1, fig. 2, *Langomeri*; id. J. f. O. 1882, p. 323; Alexander, Ibis, 1902, p. 311 *Gold Coast Colony*; Grant, Nov. Zool. 1902, p. 472; Reichen. Vög. Afr. ii. p. 621 (1903).

Enneoctonus gubernator, Shelley, B. Afr. i., No. 711 (1896).

Subspecies a Enneoctonus strümpelli.

Lanius gubernator strümpelli, Reichen. Orn. Monatsb. 1910, p. 8 *Adamawa*; id. Mittl. Zool. Mus. Berl. v., p. 223 (1911).

Adult male. Front of forehead and sides of head above the gape jet black; remainder of top of head and the hinder half of the neck pearl grey, shading into bright cinnamon on the whole of the back, upper tail-coverts, scapulars and edges of the inner half of the wing-feathers; remainder of the wings dark brown, with only a tinge of rufous on the outer edges and a fairly broad band of white across the bases of the four inner primaries forming a speculum; inner edges of quills inclining to rufous buff; axillaries and under wing-coverts whitish with a dull rufous patch next to the primaries; tail mostly black, with white ends to the five outer pairs of feathers, this white extending down the outer edges of the three outer pairs of feathers, and over the whole of the outer one with the exception of a dusky patch near the end of the inner web; lower part of cheeks, chin, throat, centre of abdomen, thighs and the under tail-coverts white; chest and sides of body pale rufous. Iris brown, bill and feet black. Total length 5·5 inches, culmen 0·55, wing 3·1, tail 2·8, tarsus 0·85. Gambaga, 2. 1. 99 (Northcott).

Adult female. Differs in the duller and browner shade of the rufous of the back and the under wing-coverts having a dusky grey patch next to the primaries; the tail is nearly uniform dark brown, with only a buff outer web to the exterior feather. Wing 3·1. Vassaka, ♀, 18. 9. 82 (Emin).

Immature. Differs from the last in the black of the head being confined to the ear-coverts, the front of forehead and region of the eyes being whitish; upper parts ashy brown, with the rufous confined to the tail-coverts, mottled with buff and black barred feathers; no white on the quills; under parts

white, with some narrow dusky bars, lower throat, front of chest, under wing and tail-coverts tinted with rufous. "Iris brown; bill and feet ashy grey." Kuterma, ♀ juvenile, 28. 5. 83 (Emin).

Emin's Red-backed Shrike ranges from Lake Chad and the hinterland of the Gold Coast Colony to the Upper White Nile. It was first described by Hartlaub from four examples sent by Emin Pasha from Langomeri, a place in what is now the Nile Province of the Uganda Protectorate, some distance to the east of Nimule on the Nile. Emin noticed it in parties of four or five individuals, and was struck by the fine note of the male, often heard when a party were together on a dead branch watching for insects.

Additional examples were subsequently sent by Emin to British Museum from Kuterma and Vassaka, in the Makrata country, now in the north-eastern corner of the Congo Free State.

In the hinterland of the Gold Coast Colony it was first found by Colonel Northcott, whose example, killed January 2, 1899, at Gambaga, is in the British Museum. It was subsequently obtained by Alexander at the same place on January 18, 1901, and at Sekwi, near by, on May 9 of the same year. In October, 1904, Alexander obtained another example at Gujiba near Lake Chad, a locality somewhat intermediate between the two extreme ends of the range.

The large outer primary and the rounded wing at once distinguish this species from the more migratory *E. collurio*.

Reichenow has recently distinguished as a new subspecies a Red-backed Shrike, from Kum in the interior of Cameroon, obtained by Captain Strümpell. It is characterized by the lighter shade of the grey of the head and of the rufous of the back and under parts.

Genus VI. PHONEUS.

*Type.*Phoneus, Kaup, Skiz. Entw. Ges. und Nat. Syst. p. 33 (1829) *P. senator*.

This genus contains the highly coloured birds known as the Woodchat Shrikes. They resemble the typical genus *Lanius* in all structural characters, and are only distinguished by their bright coloration. The crown and hind neck are bright rufous and the tail and wings are black, and the scapulars are white. The sexes are quite similar.

Three species considered by some naturalists as subspecies are generally recognized and confined to the Palearctic and Northern Ethiopian regions.

KEY TO THE SPECIES.

- a. Basal third of all the tail-feathers white; a white speculum *niloticus*.
on the wing
- b. Central pair of tail feathers black to the bases.
 - a¹. Wing with a white speculum, formed by the bases of the
primaries *senator*.
 - b¹. No white on the wing *badius*.

Phoneus niloticus.

Enneoctonus niloticus, Bonaparte, Rev. Zool. 1853, p. 439 *White Nile*.

Lanius senator niloticus, Hartert, Nov. Zool. 1906, p. 401, Vög.
paläark. Fauna, i. p. 436 (1907); Zedlitz, J. f. O. 1910, p. 807
Eritrea; Koenig, Ber. V. Intern. Orn. Congr. 1910, p. 511 *Sudan*.

Lanius paradoxus, A. E. Brehm, J. f. O. 1854, p. 75 *Blue Nile*; Butler,
Ibis, 1905, p. 328 *Blue Nile*; 1908, p. 226 *Bahr el Ghazal*; Ogilvie-
Grant, Ibis, 1902, p. 415 *Fashoda*.

Lanius senator paradoxus, Hartert, Nov. Zool. 1899, p. 417.

Enneoctonus pectoralis et *E. jardinii*, v. Muller, J. f. O. 1855, p. 450
Sennaar.

Lanius cognatus, Brehm, Vogelfang, p. 84 (1855).

Lanius rufus (non Gmel.) Ogilvie-Grant, Nov. Zool. 1902, p. 465; Ibis,
1907, p. 591 *Moradar*; Dresser, Ibis, 1905, p. 526, pl. xi. figs. 4, 5,
eggs.

Lanius senator rufus, Reichen. Vög. Afr. ii. p. 627 (1903).

Adult male. Hinder two-thirds of the crown and back of neck rich cinnamon, surrounded by a broad band of black covering the forehead, front of crown, sides of head and neck, and front of mantle; nearly always with some white feathers on sides of forehead; mantle shading into dusky grey on the middle back; rump, upper tail-coverts and entire basal third of tail white, including the bases of the central pair of feathers, remainder of tail black with the ends of

the feathers and the external margins of the outermost pair white, the amount of white increasing on both sides of the black toward the outer feathers; scapulars and broad bases to the nine longer primaries white; remainder of wing brownish black with a few narrow whitish margins to the feathers most distinct on the lesser-coverts and the inner secondaries; inner margins of quills, axillaries and under wing-coverts white, with a dusky patch next to the primaries; under parts white with a faint buffy wash on the breast and slightly more rufous on the flanks. Iris brown; bill black inclining to horny blue at base of lower mandible; feet dusky black. Total length 7.2 inches, culmen 0.65, wing 3.9, tail 3.2, tarsus 0.9. Fashoda, ♂, 30. 3. 01 (Hawker).

Adult female. Differs in the forehead, lores and eyebrows being buff mottled with black towards the crown, which is itself a paler cinnamon brown; mantle dusky grey. Wing 3.8. Gadaburka, ♀, 21. 1. 99 (Lovat).

Immature. Differ in having all the upper parts browner with no pure black; crown and back of neck rufous buff with blackish concentric bars on the feathers; wing-feathers more strongly edged with rufous buff; sides and base of throat with a few narrow dusky bars; pattern of tail as in the adults. Amba, ♂, 21. 8. 68 (Jesse).

The Eastern Woodchat Shrike ranges over south-western Asia and north-eastern Africa. It breeds in Palestine and southern Persia, and winters in Africa, chiefly in the Nile Valley and Somaliland.

In the Upper Nile valley Emin Pasha collected specimens at Lado and at Redjaf, a little further south, and this is the most southern known range for the species. He informs us that it is common in these localities, arriving in November and leaving again in March.

According to Von Heuglin it comes into north-east Africa as a migrant in August and leaves again in April, but he believed that some of the birds might remain throughout the year. He observed it on some of the islands of the Red Sea as well as on the Arabian coasts.

Blanford only met with the Woodchat Shrike on the highlands of Abyssinia and found it rare there. One of his examples taken at Halai at 8,000 ft. in February is in the British Museum, as well as one collected by Jesse at Amba

in August. As this is quite a young bird it may quite well be that this species breeds in the Abyssinian highlands.

Most of the observers and collectors in north-east Africa have met with this bird only in the early months of the year. Butler obtained it at Kambin on the Blue Nile on March 3, and in the Bahr el Ghazal in January, February and April, where it is not uncommon. He further remarks that it is frequently to be seen in the gardens and cultivated spots at Khartum at the end of August or beginning of September. Zaphiro collected specimens at Moradar on the White Nile in February, and Hawker at Fashoda at the end of March. Zedlitz only saw one Woodchat Shrike in Eritrea, which he killed at Cheren in February.

Mr. Dresser has figured the eggs of this Woodchat Shrike. Four clutches were taken by Zarudny in Arabistan, Persia, in March, 1904. They do not differ appreciably from those of *P. senator*, and they average 0.89×0.68 in dimensions.

In the British Museum the following specimens have been examined, viz.: Moradar, February (Zaphiro) and Fashoda, April 1 (Hawker), on the White Nile; Wad Medina, juvenile, September 19 (Dunn) on the Blue Nile; Gadaburka in Shoa, January (Lovat), Amba, August (Jesse), Halai, February (Blanford), all in Abyssinia; Lario, March 1, and Magois country, January 28, near Lake Rudolf (D. Smith); Makanis, Somaliland, January (Hawker). There are also a good number of examples from Egypt (taken in March), Palestine, south Persia, and one from Sindh, this last perhaps of doubtful authority.

Phoneus senator.

Lanius senator, Linn. Syst. Nat. 10th ed. i. p. 94 (1758) *Rhine Valley*; Reichen. Vög. Afr. ii. p. 625 (1903); Hartert, Nov. Zool. 1906, p. 400; id. Vög. Paläark. Fauna, i. p. 434 (1907).

Lanius ruficeps, Pallas, Vroeg's Cat. Verzam. Vogelen p. i. (1764) *Holland*.

- Lanius auriculatus*, P. L. S. Müller, *Natursys. Suppl.* p. 71 (1776);
 Gadow. *Cat. B. M.* viii. p. 283 (1883) pt.; Budgett, *Ibis*, 1901, p. 491
Gambia; Alexander, *Ibis*, 1902, p. 310 *Gold Coast Colony*.
Phoneus auriculatus, Shelley, *B. Afr.* i. No. 705 (1896).
Lanius rufus, Gmelin *Syst. Nat.* i. p. 301 (1788) *Europe*.
Lanius senegalensis, Gmelin *Syst. Nat.* i. p. 301 (1788) *Senegal*.
Lanius rutilus, Latham, *Ind. Orn.* i. p. 70 (1790) *Europe*.
Lanius rutilans, Temminck, *Man. Orn.* iv. p. 601 (1840).
Lanius pomeranus, Sparrman, *Mus. Carlson.* fasc. 1. No. 1, Taf. i. (1798)
Pomerania; Ogilvie-Grant, *Nov. Zool.* 1902, p. 464.
Lanius pomeranus pomeranus, Schiebel, *J. f. O.* 1906, p. 195.

Differs from *Phoneus niloticus* only in the pattern of the tail: the centre pair of feathers being entirely black, and in the next pair the black reaches almost to the base. Total length 6·6 inches, culmen 0·6, wing 3·7, tail 3·2, tarsus 0·9. *Gambia* (Whiteley).

The Woodchat Shrike is found all round the basin of the Mediterranean; it is most abundant in Spain and Italy, where it breeds commonly, and extends eastward to the Caucasus and Asia Minor. It passes through north Africa from Egypt to Morocco on migration, and winters in west Africa, from Senegambia to the Gold Coast Colony and northern Nigeria.

In the British Museum there is an ample series from Spain, Italy, Turkey, Cyprus and Asia Minor, and other examples from Helouan in Egypt (April 15), Tripoli, Tunis (March 27), Algeria (April) and Morocco. There are also several examples from the *Gambia* (Whiteley); two from Gambaga and Binduri (March 11 and February 20) in the interior of the Gold Coast Colony, and two from Gashaga (November 24), and Maifoni (February 4), in northern Nigeria, all collected by Alexander. Messrs. Shelley and Buckley found the Woodchat not uncommon throughout the Gold Coast in February, and Budgett stated that it is fairly common along the *Gambia* river; he obtained two young examples in December and March.

Alexander noted this species from the northern territories of the Gold Coast Colony, and writes as follows: "In a young

bird the white bases to all the primaries are conspicuous, the black forehead is slightly indicated; while the crown, nape and under parts are strongly vermiculated with brown, and the scapulars and rump are cream coloured. This bird was killed on the 11th of March, a late date if *L. auriculatus* (i.e. *P. senator*) is considered to be only a winter visitor to West Africa. At the same time fully adult males were procured, the last on May 4, 1901. At Gambaga in March a pronounced visitation of males in full plumage took place. They were no doubt retiring northwards to Europe. Still it is quite possible, though further dates are required, that a certain number remain in Africa to breed. This would account for our young birds, almost in nestling plumage, being obtained in March."

Phoneus badius.

Lanius badius, Hartl. J. f. O. 1854, p. 100 *Gold Coast*; Gadow, Cat. B. M. viii. p. 285 (1883); Ogilvie-Grant, Nov. Zool. 1902, p. 465; Kleinschmidt, Orn. Monatsb. 1901, p. 169, *Sardinia and Corsica*; Alexander, Ibis, 1902, p. 310 *Gold Coast Colony*.

Lanius pomeranus badius, Schiebel, J. f. O. 1906, p. 194, pl. H. fig. 5.

Phoneus badius, Shelley, B. Afr. i. No. 706 (1896).

Lanius senator badius, Reichen. Vög. Afr. ii. 626 (1903); id. Mittl. Zool. Mus. Berlin, v. p. 223 *Cameroon*.

Adult male. Differs from the last two species in not having the base of the primaries white, in having the upper tail-coverts deep grey, and the white on the tail of less amount, it being almost confined to the three outer pairs of feathers. The bill also is larger and paler than in *P. senator*. Iris brown; bill bluish black fading into yellowish flesh-colour at the gape and basal half of lower mandible, feet black. Total length 7·4 inches, culmen 0·65, wing 4·15, tail 3·7, tarsus 0·9. Abokobi, 26. 2. 72 (Shelley).

Hartlaub's Woodchat Shrike breeds in the islands of Corsica and Sardinia and migrates south to West Africa in winter.

The species was described by Hartlaub many years ago from the Gold Coast and the type is in the Bremen Museum.

J. E. Buckley and I during our stay in that country found it not uncommon throughout the Accra district to Abouri in Aguapim in February. In northern Nigeria, W. A. Forbes collected two specimens at Shonga in December and Hartert others at Sokoto, where the species was plentiful in the northern provinces and where he remarked that it had a louder song than *L. auriculatus* (i.e., *P. senator*). Reichenow has recently recorded this species from the Bansso Mountains in the interior of Camaroon.

Hartert seems to have been the first to notice that the Woodchat Shrikes of Corsica belong to this form. He found that an adult male shot at Porto Vecchio in Corsica on April 24, 1883, by John Whitehead, had, like the West African examples, no white speculum on the primaries. This discovery has since been confirmed by Kleinschmidt and other observers, and is also the case with the birds in Sardinia. This species is not well represented in the British Museum, which contains only Shelley's and Forbes's specimens already alluded to, and one female collected March 3, 1902, at Kintampo in the central portion of the Gold Coast Colony by Alexander.

Genus VII. OTOMELA.

Otomela Bp. Rev. Mag. Zool. 1853, p. 436. *Type.*
O. cristata.

Resembling *Lanius* in structure, distinguished only by plumage characters; general colour reddish-brown without any decided black or white; whole tail rufous or rufous brown without white or black and slightly graduated.

About six species of this genus inhabit Asia, only two reach the Ethiopian region during the winter months as migrants.

KEY TO THE SPECIES.

- a. More sandy above *isabellina.*
- b. More rufous above, especially on the crown *phœnicuroides.*

Otomela isabellina.

Lanius isabellinus, Hemprich and Ehrenb. Symb. Phys. fol. e note 2 (1828) *Gumfuda* (i.e., *Kumfuda*) in *Arabia*; Dresser B. Eur. iii. p. 413, pl. 152 (1878); Gadow, Cat. B. M. viii. p. 277 (1883); Ogilvie-Grant, Nov. Zool. 1902, p. 482; Reichen. Vög. Afr. ii. p. 624 (1903); Erlanger J. f. O. 1905, p. 703 *Somaliland*; Hartert, Nov. Zool. 1906, p. 402; Ogilvie-Grant, Ibis, 1907, p. 591 *White Nile* and *Baro river*; Butler, Ibis, 1908, p. 226, 1909, p. 394 *Sudan*; Bannerman, Ibis, 1910, p. 304, *N. Somaliland*; Koenig, Ber. V. Intern. Orn.-Kongr. 1910, p. 512 *White Nile*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 117.

Phoneus isabellinus, Shelley, B. Afr. i. No. 708 (1896).

Lanius cristatus isabellinus, Hartert, Vög. paläark. Fauna i, p. 444 (1907); Zedlitz, J. f. O. 1910, p. 806 *Eritrea* and *Abyssinia*.

Lanius arenarius, Blyth, J. A. S. Beng. xv. p. 304 (1846) *Sindh*.

Lanius ruficaudus, Brehm, J. f. O. 1857, p. 79 *Blue Nile*.

Lanius speculigerus, Tacz. J. f. O. 1874, p. 322 *Argun R., Siberia*.

Adult male. Upper parts ashy, shading into cinnamon towards the upper tail-coverts and on the tail, the latter with very narrow pale terminal edges to the feathers; front and sides of forehead and side margins of crown fading into white; lores to end of ear-coverts black; wings dark brown, with the lesser coverts like the mantle, some isabelline edges to the feathers, broader on the inner ones, and white bases to most of the primaries, forming a small speculum on the closed wing; inner edges of quills, axillaries and under wing-coverts white, the latter with a dusky patch next to the primaries, under parts buff fading into white on the cheeks and chin. "Iris dark brown; bill dark brown, horny flesh-colour below, excepting the tip; tarsi and feet slaty black." (Butler). Total length 7.0 inches, culmen 0.6, wing 3.6, tail 3.4, tarsus 0.95. Ailet, ♂, 19. 4. 00 (G. Schrader).

Adult female. Differs in being slightly paler and duller; sides of head buff with the ear-coverts only brownish-black, no black in front of the eye; flanks slightly washed with rufous. Wing 3.65. Ailet, ♀, 19. 4. 00 (Schrader).

Immature. Slightly more isabelline above, some narrow curved dusky bars on the sides of the throat and chest.

The Pale Red-tailed Shrike breeds in Central Asia probably throughout Turkestan and Kashgaria, while in winter it migrates south to north-west India, Persia, Arabia, and north-east Africa. Within our limits it has been met with at Suakim on the Red Sea and at Shendy in the Nile valley

southwards to Somaliland and the Sobat River. Possibly it may range farther south into British East Africa, but most of the Red-tailed Shrikes obtained there seem to belong to the following species (*O. phænicuroides*). Sjöstedt has certainly recorded the present form from the desert country near Meru in January.

The type was obtained by Hemprich and Ehrenberg at Kumfuda on the Arabian coast about opposite Suakim. On the Upper White Nile it has been obtained by Hawker at Kaka on March 2, and near Fashoda on April 4; Zaphiro collected a small series at Lake Tinero on the Baro River on April 2 to 4, and at Renk on January 29. In Abyssinia and Eritrea Blanford found it common on the coast in December and again in August, but not in July when it was away in the interior. Erlanger obtained several examples at Zeila and other localities in northern Somaliland in December, January and February, and Zedlitz met with it as late as April 20 at Taccaze, on the northern border of Abyssinia. Butler found it common between Suakim and Erkowit in March and April, 1906, and two years later met with it as late as May 4, at Khor Arbat near Port Sudan. He further states that he has seen it at Khartum in October and November.

Owing to it having been so often confused with the allied *O. phænicuroides* it is difficult to disentangle their respective ranges with very great certainty, but the African examples in the British Museum examined are as follows:—

Sudan—Kaka and Fashoda (Hawker), Renk and Lake Tinero (Zaphiro), Shendi (Rothschild); *Abyssinia*—Zouilla (Blanford), Lake Tsanna (Bouvier), and Ailet in Bogosland (Schröder).

Otomela phœnicuroides.

Lanius phœnicuroides Severzow J. f. O. 1873, p. 347 *nom. nud.*;

Neumann, J. f. O. 1905, p. 229 *Shoa*; Erlanger t.c. p. 703 *North Somaliland*; Gurney, Ibis, 1909, p. 499 *British East Africa*.

Otomela phœnicuroides Schalow, J. f. O. 1875 p. 148 *Tschimkent, Turkestan*.

Lanius cristatus phœnicuroides, Hartert, Vög. paläark. Fauna i. p. 443 (1907); Zedlitz, J. f. O., 1910, p. 806 *Eritrea*.

Lanius isabellinus (non Hempr. and Ehr.) Walden, Ibis, 1867, p. 224 pl. 5, fig. 1.

Lanius phœnicurus var. *montana*, var. *ruficeps*, var. *caniceps*, Severzow, Turkest. Jevotn. pp. 143, 144, 145 (1873).

Otomela phœnicuroides, subsp. *romanowi*, subsp. *karelini*, Bogdanow, Wurger Russ. Reichs. p. 14 &c., pl. 1 (1881).

Otomela varia, Sarudny, Mater. Kenntn. Fauna Flora Russ. Reichs, Zool. Theil ii, p. 194 (1896).

Similar to *O. isabellina* from which it differs only in the brown of the upper parts being rufous instead of sandy, and the top of the head being strongly washed with rufous. Total length 7·5 inches, culmen 0·6, wing 3·65, tail 3·4, tarsus 0·9. Goolis, ♂, 18. 3. 97 (L. Phillips).

Severzow's Red-tailed Shrike breeds in Transcaspia, Turkestan, Afghanistan, and perhaps Persia, apparently to the west of the breeding range of the Pale Red-tailed Shrike, but their respective breeding ranges are not very well determined. In winter it migrates south to southern Arabia, Abyssinia, Somaliland, and British East Africa. Neumann was the first observer who definitely recorded this species from Africa; he obtained a female on the banks of Lake Abaya in southern Shoa on December 28, and remarked that it, as well as all the Red-tails he obtained in East Africa, were undoubtedly referable to this species. Erlanger also obtained three specimens on the Zeila-Djeldessa road in north Somaliland in February. Gurney found this Shrike common amongst the thick bush near the Athi River in British East Africa, and Zedlitz obtained one specimen at Cheren in Eritrea on February 13.

I have examined the following African examples in the

British Museum. *Abyssinia*—Annesley Bay, February 1 (Blanford); *Somaliland*—Goolis foothills, March 18, Berbera, January 19, Sheikh, January 22 (Lort Phillips), Somadu, January 22 (Pease); *British East Africa*—Waso Nyro, January 29, Gessima, Lakipia, January 24, Nairobi, December 4 (Delamere).

Subfamily II. LANIARIINAE.

Bill more variable than in the *Laniinae*, but generally more slender and compressed, culmen generally straight, hooked and notched at the tip; nostrils free from the frontal bristles and exposed; never with a crest on the head; wings short and rounded, the third or fourth primaries generally the longest, and the first about two-thirds the length of the second; feathers of the rump soft and fluffy and often erectile into a soft powder-puff-like appendage; sexes alike or not very different from one another.

This subfamily contains the Bush-Shrikes, non-migratory birds of rather feeble flight as a rule; with one exception, *Tschagra cucullata* of Morocco and Algeria, they are confined to the Ethiopian region, excluding Madagascar.

KEY TO THE GENERA.

- a. Tail always more than two thirds the length of the wing.
 - a¹. No shade of green on the upper parts.
 - a². No bright pink on the lower back.
 - a³. Wings and their coverts black or black and white in adults.
 - a⁴. Rump not contrasting with the mantle; sexes alike *Laniarius*.
 - b⁴. Rump white or grey contrasting with the mantle; sexes generally distinguishable.
 - a⁵. Bill compressed, culmen ridged *Dryoscopus*.
 - b⁵. Bill rather depressed and broad, culmen flat and not ridged *Chaunonotus*.
 - b³. Wings more or less bright chestnut.
 - c⁴. Bill longer and more slender; tail tipped with white; sexes alike *Tschagra*.
 - d⁴. Bill shorter and stouter; tail not strongly white-tipped; sexes differing *Antichromus*.
 - b². Wing-coverts and upper parts pale brown; lower back rosy pink *Rhodophoneus*.

- b*¹. Some shade of green on the upper back.
*c*². Two proximal phalanges of 3rd and 4th toes free and normal.
*c*³. A black gorget across the chest.
*e*⁴. Bill stout and strongly notched, culmen straight for the basal two-thirds *Telophorus*.
*f*⁴. Bill short and slender, culmen gently curved throughout; notch very feeble *Neolestes*.
*d*³. No black gorget; axillaries and wing lining yellow.
*g*⁴. Bill very large and stout and strongly hooked, not less than 4 inch deep; wing-coverts and quills tipped with yellow; sexes alike . . . *Malaconotus*.
*h*⁴. Bill moderate and less strongly hooked; males with a black band on the sides of the head . . *Chlorophoneus*.
*d*³. Two proximal phalanges of the 3rd and 4th toes united in a common sheath; secondaries and coverts spotted with pale yellow *Nicator*.
b. Tail about half the length of the wing; plumage black, white and grey *Lanioturdus*.

Genus I. LANIARIUS.

Bill moderate not very strongly hooked; nostrils rounded, at the front end of a groove and not overhung by bristles or frontal feathers; a few rictal bristles; wing rounded and rather short, the fourth to sixth primaries the longest; tail about the same length as the wing; puff-feathers of the rump long, soft, and often with white spots but not contrasting strongly in colour with the mantle; sexes alike; plumage black or blackish above, below black, yellow, red or whitish.

Type.

Laniarius, Vieill. Analyse, p. 41 (1816) *L. barbarus*.

Rhynchastratus Bp. Comptes Rend. xxxviii. p. 535

(1854) *L. leucorhynchus*.

This genus contains twenty-eight species and is confined to tropical and south Africa.

KEY TO THE SPECIES.

- a*. Underparts white or only washed with tawny or rosy.
*a*¹. Crown and nape bright rufous *ruficeps*.
*b*¹. Only the nape rufous, crown shiny black.
*a*². Nape-patch larger and brighter *rufinuchalis*.
*b*². Nape-patch smaller and paler *kismayensis*.

- c*¹. Crown and nape cinnamon *luehderi*.
*d*¹. Crown black like the rest of the upper parts.
*c*². A white longitudinal band along the wing formed by the middle coverts and a white edging to some of the inner secondaries.
*a*³. Flanks and under tail-coverts strongly washed with tawny *ferrugineus*.
*b*³. Underparts faintly washed with rosy; under tail-coverts almost white.
*a*³. Larger, wing about 3·9 *major*.
*b*³. Smaller, wing about 3·6 *mossambicus*.
*c*³. Underparts pure white, no rosy or tawny, wing about 3·6 *guttatus*.
*d*². White on the wing confined to the coverts, no white on secondaries.
*d*³. Underparts washed with rosy.
*a*⁴. White on the wing extending on to the longest secondary coverts; larger wing 4·2 *aethiopicus*.
*b*⁴. White on the wing more restricted, confined to the middle row of coverts.
*a*⁵. Larger, wing about 3·6 *ambiguus*.
*b*⁵. Smaller, wing about 3·3 *somaliensis*.
*e*³. Underparts pure white, no rosy *bicolor*.
*e*². No white on the wing at all.
*f*³. Larger, wing about 4·2; strongly washed with rosy on the breast *turatii*.
*g*³. Smaller, wing about 3·5; less rosy on the underparts *sublacteus*.
b. Underparts bright yellow *atroflavus*.
c. Underparts bright crimson.
*e*¹. Crown and nape olive yellow contrasting with the back.
*f*². No white on the wings *barbarus*.
*g*². Median coverts broadly tipped with white *mufumbiri*.
*f*¹. Crown and nape black like the back.
*h*². A white longitudinal band on the wing; under tail-coverts like the under parts *atrococcineus*.
*j*². No white on the wing; under tail-coverts cinnamon.
*h*³. A few yellow-tipped white feathers in front of the shoulder *chrysostictus*.
*j*³. Feathers in front of the shoulders black *erythrogaster*.
d. Underparts black or dark slaty, like the upper parts.
*g*¹. With white subterminal spots on the rump.
*k*². Dark slaty above and below.

- | | |
|---|--|
| k^3 . No white spot on the breast | <i>funnebris.</i> |
| l^3 . A white triangular spot on the breast | <i>alboplagatus.</i> |
| l^2 . Black above and below | <i>erlangeri.</i> |
| h^1 . No spots on the rump but the feathers of those parts
subterminally grey | <i>nigerrimus.</i> |
| j^1 . Rump feathers black throughout, not paler sub-
terminally; tail shorter than the wing. | |
| m^2 . Sooty black above and below. | |
| m^3 . Larger, wing about 3·9 | <i>leucorhynchus.</i> |
| n^3 . Smaller, wing about 3·2, tail quite short | { <i>holomelas.</i>
<i>poensis.</i> |
| n^2 . Slaty, not sooty; wing about 3·4 | <i>fulliborni.</i> |

Laniarius ruficeps.

Dryoscopus ruficeps, Shelley, Ibis, 1885, p. 402, pl. 10 *Somaliland*.

Laniarius ruficeps, Shelley, B. Afr. i. No. 718 (1896); Reichen. Vög.
Afr. ii. p. 585 (1903); Sharpe, Handl. B. iv. p. 293 (1903);
Bannerman, Ibis, 1910, p. 303 *Somaliland*.

Adult. Forehead and sides of the crown black; crown and nape bright rufous-red; a broad white eyebrow, covering the sides of the forehead, and extending back behind the ear-coverts; lores, and sides of the head and neck, jet-black; hinder neck and the upper back ashy-grey, passing into glossy jet-black on the scapulars and lower back where the feathers have large white, subterminal marks; upper tail-coverts entirely black; tail black, the three outer pairs of feathers with white ends, the outer pair with a white outer margin as well; wings mostly black, with a white longitudinal band across the median series of wing-coverts, and extending down the outer edges of three of the secondaries; broad inner edges to the quills, and nearly all the under wing-coverts, pure white; under parts white, very faintly tinted with rufous on the flanks and thighs. "Iris hazel; bill black; feet dusky grey." Total length 7 inches, culmen 0.75, wing 3.0, tail 2.9, tarsus 1.1. Central Somaliland, 2. 1. 85 (Lort Phillips).

The Red-crowned Bush-Shrike inhabits Somaliland.

It was first brought to England by Mr. Lort Phillips, who obtained a single example, probably at Burao, about seventy miles south of Berbera, on January 2, 1885.

The British Museum contains six additional examples obtained by Bury recently at Burao, and one from the Delamere collection, obtained at Logh on the Juba River

much further south, near the junction of Italian, British and Somali territory.

It is probably distributed throughout the western dry portion of Somaliland. Nothing is known about its habits.

Laniarius rufinuchalis.

Dryoscopus rufinuchalis, Sharpe, P. Z. S. 1895, p. 479 *Durro*, *W. Somaliland*.

Laniarius rufinuchalis, Shelley, B. Afr. i. No. 719 (1896); Reichen. Vög. Afr. ii. p. 586 (1903); Sharpe, Handl. B. iv. p. 293 (1903); Erlanger, J. f. O. 1905, p. 698, *S.W. Somaliland*.

Subspecies a. Laniarius kismayensis.

Dryoscopus ruficeps kismayensis, Erlanger, Orn. Monatsb. 1901, p. 182 *Kismayu*.

Laniarius kismayensis, Sharpe, Handl. B. iv. p. 293 (1903).

Laniarius rufinuchalis kismayensis, Reichen. Vög. Afr. ii. p. 586 (1903); Erlanger, J. f. O. 1905, p. 698.

Adult male. Similar to *L. ruficeps*, but differing in the black of the head, extending back over the front half of the crown, while the rufous-scarlet patch is confined to the hinder crown and the nape; scapulars uniform black, with no subterminal white patches to the feathers, but the rump and upper tail-coverts spotted as in *L. ruficeps*. "Iris brown; bill black; feet grey" (D. Smith). Total length 7 inches, culmen 0.75, wing 3.0, tail 3.3, tarsus 1.1. Abdula, ♂, 25. 11. 94 (F. Gillett).

L. kismayensis. "Very similar to *L. rufinuchalis*, but the red nape patch is smaller and paler, and mixed with grey. Iris red-brown; feet lead-grey. Bill larger, culmen 0.80 to 0.84" (Reichenow).

The Red-naped replaces the Red-crowned Bush-Shrike in western Somaliland and in British East Africa.

The type, described by Sharpe, was obtained by Dr. Donaldson Smith at Durro on December 1, 1894, together with two other examples at Dabulli and Tooloo Duroo, while his companion, Mr. F. Gillett, procured a single specimen at Abdulla—all localities in western Somaliland.

Ansorge obtained an example at Kinani in the Ukamba Province of British East Africa, and Baron von Erlanger

collected a series at several localities along the valley of the Juba River, also in western Somaliland.

The last named states that this Shrike lives in thick underwood which it seldom leaves, and that it is often seen perched on a bare twig on the look-out for insects on the ground, on which it pounces; the cry of one sex is "terra" answered by "küid" from the other. He found two nests in the land of the "Garre Liwin" on May 8 and 12 respectively; they were placed low down in a bush, and were slenderly constructed of rootlets and grass-stems. The eggs, two and three in number, were dirty green and rather rough, spotted with clay-brown, especially at the larger end; they measured about 0.9×0.6 .

The British Museum contains only the type, and Mr. Gillett's specimen already alluded to.

The Red-naped Bush-Shrikes of southern Somaliland are distinguished subspecifically by Erlanger from those of the western districts. The type was procured by the describer at Kismayu near the mouth of the Juba River.

Laniarius luehderi.

- Dryoscopus lühderi*, Reichen. J. f. O. 1874, p. 101 *Cameroon*; Gadow, Cat. B. M. viii. p. 134 (1883); Jackson, Ibis, 1901, p. 41 *Nandi*.
Laniarius luederi, Shelley, B. Afr. i. No. 720 (1896); Reichen. Vög. Afr. ii. p. 584 (1903); Sharpe, Handl. B. iv. p. 293 (1903); id. Ibis, 1908, p. 330 *Cameroon*; Ogilvie Grant, Trans. Zool. Soc. xix. p. 341 (1910) *Ruwenzori*; Reichen. D. Zentral Afr. Exped. Zool. i. p. 313 (1910) *Kivu*; id. Mittl. Zool. Mus. Berlin, v. p. 82 (1910) *Rio Benito*; Bates, Ibis, 1911, p. 538, pl. ix. *eggs*.
Dryoscopus coronatus, Sharpe, P. Z. S. 1874, p. 205, pl. 33 *Danger River*.
Laniarius castaneiceps, Sharpe, Ibis, 1891, pp. 445, 598 *Mt. Elgon*; Shelley, B. Afr. i. No. 721 (1896).
Laniarius dubiosus, Reichen. Orn. Monatsb. 1899, p. 130; id. Vög. Afr. ii. p. 585 (1903) *Cameroon*; Sharpe, Handl. B. iv. p. 295 (1903).

Adult.—Crown and nape dark cinnamon, slightly paler on the forehead and sides of the crown; sides of the head and neck and most of the upper parts black; wing, with a white longitudinal band formed by the broad ends of the median-coverts, a few of the greater coverts, and the outer margins of two of the secondaries; lower back slightly mottled with white, which is generally confined to the subterminal portion of the feathers, but sometimes forms also a distinct bar next to the uniform black upper tail-coverts; under wing-coverts mostly white; bend of wing, and under surface of quills black, the latter with whitish inner margins; head below the gape, throat and chest cinnamon-buff, fading into white on the remainder of the under parts. Iris dark hazel; bill black; feet slate-grey. Total length 9.0 inches, culmen 0.85, wing 3.45, tail 3.5, tarsus 1.2. River Ja, ♂, 5. 2. 06 (Bates). A female is quite indistinguishable from the male except that the iris is stated by Dent to be crimson, wing 3.6 (Bates).

Immature.—A very young bird, probably just out of the nest (River Ja, 12. 11. 06, Bates), is finely barred with olive and dusky above except the tail, which is rufous brown; below olive narrowly barred with slaty, and slightly washed on the breast with yellow. A slightly older bird (Zima country, ♂, 12. 10. 05, Bates) is olive brown above with an olive brown tail; below rather bright olive yellow; the longitudinal wing band is yellowish and not so clearly marked as in the adult. A still older bird (Mt. Elgon, ♀, 25. 2. 90, type of *L. castaneiceps*, Sharpe) still retains the brown tail, but shows traces of the oncoming chestnut crown and paler cinnamon breast.

Lühder's Bush Shrike ranges over West Africa, from Cameroon to Gaboon on the coast and inland to Uganda and the Nandi country of British East Africa.

It was first collected by Lühder in the Camaroon Delta, and named after the discoverer by Reichenow; a few months later it was redescribed under another name by Sharpe, to whom an example was sent by Mr. H. Ansell from Danger River in Gaboon.

The young bird described by Reichenow from Camaroon as *L. dubiosus* cannot, in my opinion, be anything but this species. This is also the case with *L. castaneiceps* from Mt. Elgon, as is acknowledged by Sharpe.

From the forest west of Tanganyika, and from Kwidschi, an island in Lake Kivu, this species has been obtained by Grauer, and from the Mpanga Forest near Fort Portal on the eastern slopes of Ruwenzori by Dent and Woosnam.

Bates, who has sent to the British Museum a good series of this bird, writes as follows on its habits: "One of the commonest birds in the thick, impenetrable growth of bushes, small trees and vines that cover old cleared land. It is the most home-keeping of birds, I have never seen it fly out of its thickets. The call and answer of the male and female are sounds continually in one's ears when walking on the paths through such places, but the birds are not often seen."

The specimens examined in the British Museum are from the following localities: *Cameroon*—Efulen, River Ja, and Zima country (Bates); Danger or Muni River, in *Gaboon*, type of *D. coronatus* (Ansell); *Uganda*—Mpanga Forest near Fort Portal (Ruwenzori expedition), Mt. Elgon, type of *L. castaneiceps* and Nandi (Jackson). There is an example from Kibirau, in Toro, Uganda, in Mr. Jackson's collection.

Laniarius ferrugineus.

- Lanius ferrugineus*, Gmel. Syst. Nat. i. p. 306 (1788) *ex Latham*,
Cape of Good Hope.
Laniarius ferrugineus, Shelley, B. Afr. i. No. 722 (1896).
Dryoscopus ferrugineus, Sel. and Stark, Bds. S. Afr. ii. p. 27 (1901);
Shortridge, Ibis, 1904, p. 182 *Pondoland*.
Malaconotus rufiventris, Swains. Classif. ii. p. 220 (1837) *ex Levaill*.
Laniarius rufiventris, Reichen. Vög. Afr. ii. p. 582 (1903); Sharpe,
Handl. B. ix. p. 293 (1903); Oates and Reid, Cat. B. Eggs, B. M. iv.
p. 292, pl. xiii. fig. 7 (1905).
Dryoscopus rufiventris, C. Taylor, J. S. Afr. Orn. Union, 1907, p. 19
Ermelo; Haagner and Ivy, *ibid.* p. 89 *Albany*; W. L. Sclater, Ibis,
1911, p. 287.
Lanius cafer, Forst. Licht. Descr. Anim. p. 398 (1844).
Laniarius bouboul (non-Lath.), Gray, Gen. B. i. p. 299 (1844).
Laniarius bulbul, V. Müll. J. f. O. 1855, p. 453.
Laniarius æthiopicus hybridus, Neum. J. f. O. 1899, p. 407 *Transvaal to*
Zambesi.
Laniarius rufiventris hybridus, Reichen. Vög. Afr. ii. p. 583 (1903).
Laniarius hybridus, Sharpe, Handl. B. iv. p. 294 (1903).

Dryoscopus rufiventris hybridus, Taylor, J. S. Afr. Orn. Union, 1906, p. 66 *Irene*.

Dryoscopus sticturus (non Hartl. and Finsch), Gadow, Cat. B. M. viii. p. 136 (1883).

Le Boubou, Levaillant, Ois. d'Afr. ii. p. 73, pl. 68 (1799).

Adult male.—Upper parts and sides of the head and neck glossy black, a little less glossy on the quills; feathers of lower back washed with rufous and subterminally white; wing, with the greater portion of the median coverts, three of the greater coverts and the outer margins of two of the secondaries, white; under wing-coverts buff, with the outer ones and a patch near the primaries black; under surface of quills brown, generally with paler inner edges; under surface cream-colour, shading into cinnamon-buff on the abdomen, flanks, thighs, and under tail-coverts. Iris dark brown; bill black; feet slate-grey. Total length 9 inches, culmen 0·9, wing 4·2, tail 3·9, tarsus 1·5. Drakensberg, ♂, 7. 8. 81 (A. E. Butler).

Adult female.—Differs in having the upper parts browner and nearly the whole of the under parts shaded with cinnamon-buff; inner margins of the quills whiter; bill brown; wing 3·9. Drakensberg, ♀, 13. 8. 81 (A. E. Butler).

Immature.—Upper parts and sides of head dark brown, with rusty brown ends and black subterminal bars on the feathers of the crown, many of the wing-coverts, upper tail-coverts, and the ends of the three outer pairs of tail-feathers; a few of the median wing-coverts with white ends; pale edges to the two secondaries rufous buff; chin and upper half of the throat white, passing into rufous-buff on the remainder of the throat, centre of chest and abdomen, deepening into pale cinnamon on the flanks, thighs and under tail-coverts; the crop and chest mottled with dusky bars. Bill horn-colour, fading into white at the base of the lower mandible; tarsi and feet grey. Length in the flesh 8·6 inches. Durban, 27. 3. 74 (Shelley).

The Boubou Shrike appears to be confined to South Africa south of the Limpopo for the most part, though perhaps extending as far north as the Inhambane district of Portuguese East Africa, where two females indistinguishable from typical examples were obtained by C. Grant. It has not hitherto been noticed in Rhodesia or Damaraland.

Gmelin's name for this species was founded on Latham's description of the "Ferruginous-bellied Shrike" (Gen. Synop. i. 1781, p. 163), "from the Cape Good of Hope in the collection of Miss Blomefield"; there is no doubt in my mind

that Latham's bird is identical with Levaillant's Boubou, and has nothing to do with Latham's Boulboul (Index Orn. i, p. 81), from India.

Mr. Layard writes that this bird is the Boubou of Levaillant and the "Bonte Canaribyster" and "Zwarte Canaribyster" of the Colonists. It appears to be distributed along the south of Cape Colony, and is not uncommon about wooded places in the neighbourhood of Cape Town and Rondebosch. In Natal I found this species very common in the thick bush about Durban, often in family parties and constantly on the move, and tolerably noisy; Butler, Feilden and Reid met with it on the Drakensberg near Newcastle, and also at Maritzburg and remark "Not very common and strictly a woodland species frequenting the densest bush. It is very shy, keeping out of sight as much as possible, and is usually found singing." They also remarked on its loud note.

Claude Grant writes: "This Shrike was commonly noted from the Cape Peninsula, the Knysna, Zululand, the eastern and north-eastern Transvaal, and the Inhambane district of Portuguese East Africa. It frequents forest and well-timbered country and, except when the young are about, is found in pairs. It feeds chiefly on coleopterous insects, and never, I believe, attacks small birds. The whistle-call 'hoo-hoo' of the male followed immediately by the answering call of 'ku-ee' of the female at once betrays its presence. It is skulking in habits and the flight when indulged in is of short duration."

The nest, according to Ivy, is a very shallow one of rootlets and small twigs in the centre of a thick bush. The eggs according to the Woodwards are three in number, light blue speckled with red-brown, somewhat more densely at the obtuser end. They are figured in the Catalogue of Eggs in the British

Museum, where the measurements are given as 1.1 to 0.97 × 0.77 to 0.72.

The British Museum contains examples from the following localities: *Cape Colony*—Durban Road and Table Mountain (Grant), George (Layard), Knysna (Andersson and Grant), Elands Post (Atmore), Chalumma River (Trevelyan); *Natal*—Durban (Shelley, Gorge, Ayres), Drakensberg (Butler), Ngoye Forest in Zululand (Grant); *Transvaal*—Rustenburg (Lucas), Crocodile River (Oates), Lydenburg (Barratt), Swaziland (Buckley), Woodbush and Legogot (Grant); *Portuguese East Africa*, Coguno (Grant).

Laniarius major.

Telephonus major, Hartl. Rev. Zool. 1848, p. 108 *Elmina*.

Laniarius major, Shelley, B. Afr. i. No. 725 (1896); Reichen. Vög. Afr. ii. p. 580 (1903); Sharpe, Handl. B. iv. p. 294 (1903); Ogilvie-Grant, Ibis, 1905, p. 202 *Mulema*; 1908, p. 290 *N.W. Tanganyika*; Sharpe, Ibis, 1908, p. 334 *Cameroon*; Ogilvie-Grant, Trans. Zool. Soc. xix. p. 341 (1910) *Ruwenzori*; Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 312 (1910) *Kivu dist.*; id. Mittl. Zool. Mus. Berl. v. p. 222 (1910) *Cameroon*.

Dryoscopus major casatii, Hartl. J. f. O. 1889, p. 117 *Wadelai*.

Dryoscopus albofasciatus, Sharpe, Ibis, 1891, p. 598 *Mt. Elgon*.

Adult. Upper parts and sides of the head black with a blue gloss; feathers of the scapulars generally, and those of the lower back, have sub-terminal white patches so that the powder-puff-like feathers of the rump are mingled white, grey and black; wing, with a clear longitudinal white band formed by the median-coverts, a few of the greater coverts and broad outer edges to two of the secondaries; under parts white with a more or less rosy tinge. Iris brown, bill black, feet grey. Jackson gives "iris dull crimson, bill black, feet horn blue." Total length 8.8 inches, culmen 1.0, wing 3.9, tail 4.4, tarsus 1.35 Abokobi, 27. 2. 72 (Shelley).

Immature. Differs in having buffy white edges and tips to many of the feathers, especially of the greater coverts, outer tail feathers with white tips and a much paler bill. Kwango, 16. 11. 05. (Boyd Alexander).

The West African Boubou Shrike ranges from Sierra Leone to Cameroon along the west coast of Africa and eastwards to

the Bahr el Ghazal province of the Sudan and the Rift Valley, beyond which its place is taken by *L. aethiopicus*.

The type, described by Hartlaub, came from Elmina in the Gold Coast Colony; here I have found them abundant, frequenting the jungle, which resounds with their sweet flute-like notes, as pairs answer each other at short intervals from distant bushes. It is as Ussher remarks "a powerful bird for its size and appears to be much dreaded by other small birds." Alexander obtained it at Kpong and Kintampo in the interior of the Gold Coast Colony, and states that it frequents marshy situations, especially along the lower reaches of the Volta river, and that it has a harsh guttural note. In Togoland and Camaroon it has been met with by the German collectors Büttner, Zenker and Carnap, while Hartert found it at Loko on the Benue in Nigeria.

In Central Africa it was first collected by Jackson at Mount Elgon and one of his examples was described as a new species by Sharpe. Jackson (*Ibis*, 1901, p. 37) writes: "This fine Shrike is almost invariably found in pairs, and either in or on the outskirts of thick bush. Its cry may be heard throughout the day in the localities it frequents, but can scarcely be called a call-note in the true sense of the word, as the two birds are nearly always quite close together when they give utterance to it. It has a beautiful bell-like note. The cock bird repeats it three times, the hen only once. I have several times watched them in the act of calling."

From Uganda it extends northwards as far as the Bahr el Ghazal Province of the Sudan, whence there are two examples in the British Museum, one recently collected by Gilbert Blaine, the other by Bohndorf at Semnio. To the south it ranges to Lake Nyasa, where according to Reichenow it was obtained by Fülleborn at Langenburg.

The following list of the examples in the British Museum will perhaps best illustrate the distribution of this form :—

Sierra Leone (Tweeddale Coll.); *Gold Coast*—Accra (Buckley and Smith), Fantee (Ussher and Shelley), Kpong and Kintampo (Alexander); *Southern Nigeria*—Abeokuta (Robin); *Camaroon*—Ja River (Bates); *Northern Nigeria*—Lokoja and Kaduna River (Alexander); *French Congo*—Kwango and Ratu River (Alexander); *Belgian Congo*—Angba on the Welle (Alexander); *Egyptian Sudan*—Semnio in the Bahr el Ghazal (Bohndorf); *Uganda*—Fadibek and Langomeri in the Nile Province (Emin), Mount Elgon (Jackson), Mulema (Doggett), Toro and Ruwenzori (Woosnam and Carruthers); *British East Africa*—Nandi and Ravine (Jackson).

Laniarius mossambicus.

Dryoscopus major mossambicus, Reichen. J. f. O. 1880, p. 141 *Mozambique*.

Laniarius mossambicus, Shelley, B. Afr. i. No. 723 (1896).

Dryoscopus mossambicus, Stark and Sel. Bds. S. Afr. ii. p. 29 (1901); Stoehr and Sel. J. S. Afr. Orn. Union, 1906, p. 95 *Feira*; Neave, Man. Mem. li. No. 10, p. 74 (1907); *Loangwa River*, id. Ibis, 1910, p. 228 *Katanga*.

Laniarius major mossambicus, Reichen. Vög. Afr. ii. p. 580 (1903); W. Sel. Ibis, 1911, p. 287 *Beira and Tete*.

Dryoscopus guttatus (non Hartl.), Swynnerton, Ibis, 1907, p. 47, 1908, p. 53 *Gazaland*.

Laniarius major (non Hartl.), Swynnerton, J. S. Afr. Union, 1911, p. 8.

Adult. Closely resembling *L. major*, from which in fact it only differs in its slightly smaller dimensions; the lower parts are as a rule washed with a shade of cinnamon rather than rosy, and this extends on to the throat and under tail-coverts; usually only two of the secondaries are edged with white, but sometimes three and sometimes one only, are so marked; the outer tail-feathers are very frequently though not invariably tipped with white, even in examples which otherwise appear to be adult. Iris dark hazel, bill black, legs lead coloured. Length about 9.0 inches, wing 3.7, tail 4.1, culmen 0.9, tarsus 1.2; wing of ♀ 3.6. Zambesi River, 16. 8. 98 and 10. 10. 98 (Alexander).

Immature. Have the base of the lower mandible much paler, the underparts more strongly washed with cinnamon, the white spots on the tail slightly washed with tawny, and the greater wing-coverts edged with the same.

The Mosambique Boubou takes the place of the West African Boubou south of about 10° S. L. from the Nyasa-Tanganyika plateau and the Rovuma River to Mashonaland and Gazaland.

The type was obtained by Fischer at Mosambique. It is very abundant throughout Nyasaland, where it has been procured by Whyte and other collectors. Kirk, Alexander and Claude Grant collected many examples along the Zambesi, while Marshall and Swynnerton have given good accounts of its habits in Mashonaland.

To the westwards in north-west Rhodesia and in Matabeleland this form, which should be considered as a subspecies only, becomes slightly larger and paler below and merges into *L. guttatus*. This is clearly shown in examples obtained by Bradshaw in the Makalaka country, and by Neave in Katanga.

Alexander (Ibis, 1899, p. 580) writes as follows of his experiences with this bird on the Zambesi. "From Tete onwards this species is well distributed along the river, for hardly a day passed without our hearing its clear-drawn piping notes. This Shrike abides in reed-beds, belts of fish-cane, and also frequents open land that is interspersed with clumps of thick bushes. When we first observed this species at the beginning of August, breeding had not commenced, and it was shy and difficult to approach. When the breeding time arrives the different pairs resort to reed-beds and thick places, and lose a good deal of their shyness." He goes on to describe the gruff croak-like call-note of both sexes, and the love-note of the male, which is a soft clarion-like whistle followed by a sound resembling that of a hammer when tapped against a sheet of tin. He further states that they often attack and prey on small birds such as Estrildas.

Swynnerton says that in Gazaland it is called "Icivana"

by Singuni people. He writes "I found several nests of these birds in November; these were placed at from about 4 to 7 feet from the ground and without any attempt at concealment. They were constructed externally chiefly of roots, but these were usually intermixed with a few dry herb-stems, in one or two cases a little grass or a strip of bark. They were lined entirely with reddish-brown roots, compactly arranged, or the midribs of some pinnate leaf. External diameter of nest 4·0 to 5·1 inches. Diameter of cup about 3 inches and depth 0·8 to 1·4. The eggs are always two in number, pale greenish blue or white, very faintly tinged with greenish blue, with spots and blotches of violet-grey and various shades of brown." There is a good deal of variation in the markings and they measure from 0·9 to 1·0 × 0·7 to 0·75. Swynnerton does not mention that they attack other small birds, but from an examination of their crops believes that their food consists mostly of beetles with other insects.

The following is a list of the localities from which there are examples of this species in the British Museum :—

German East Africa—Rovuma River (Thomson); *Nyasaland*—Zomba, Milanji, Chiromo, Kombe-Masuka (Whyte), Kasungu, Chikala, Ikala, S. Angoniland (Sharpe); *Zambesi river*—Kafue to Chicowa (Alexander), Tete and Shupanga (Kirk), Tete (Grant); *Portuguese East Africa*—Beira (Grant); *S. Rhodesia*—Gazaland (Swynnerton), Sabakwe River (Clarke), Makalaka country (Bradshaw); *Belgian Congo*—Kambove and Bunkeya River in Katanga (Neave).

Laniarus guttatus.

Dryoscopus guttatus, Hartl. P. Z. S. 1865, p. 86 *Benguella*; Gadow, Cat. B. M. viii. p. 137 (1883).

Laniarus guttatus, Shelley, B. Afr. i. p. 726 (1896); Sharpe Handl. iv. p. 294 (1903).

Laniarius major guttatus, Reichen. Vög. Afr. ii. p. 580 (1903).

Laniarius sticturus, Hartl. and Finsch, Vög. Ost Afr. p. 342, pl. 5, fig. 1,
Lake Ngami.

Dryoscopus finschii, Bocage, Angola, p. 229 (1881) *Pungo-Andongo*,
Ambaca.

Dryoscopus neglectus, Bocage, Angola, p. 230 (1881) *Mossamedes*.

Adult. Very close to *L. mossambicus*, but with the under parts pure white and without a trace of the rosy tinge, at any rate in the adult; as a rule the white spotting on the rump is rather conspicuous and extends forwards on either side to the scapulars; usually the three inner secondaries, but sometimes only two, are broadly edged with white. "Iris dark brown, bill black, feet slaty blue" (Ansorge). Length 8·5 inches, wing 3·8, tail 3·5, tarsus 1·35, culmen 0·90. N'Dalla Tondo, ♂, 26.9.08 (Ansorge). A very large male from Lake Ngami (Woosnam) has the wing 4·3 and tail 4·2.

The Angola Boubou ranges from the Portuguese Congo south to the Cunene and eastwards to the Victoria Falls country and to Lake Ngami. Further east and north-east in Katanga and the neighbourhood of Lake Mweru it merges into the Mosambique Boubou, while to the north it becomes *L. bicolor*.

The type of the species, now in the British Museum was described by Hartlaub and was obtained by Monteiro on the coast lands of Benguella; Anchieta met with it in many localities throughout Angola, and states that it is there known to the natives as "Sequi" or "Gongo." Bocage believed that he could distinguish two additional species in Angola. *L. finschii* with a white edging to the outer web of the outer tail-feather, and *L. neglectus* with three, not two, of the secondaries white-edged, but the former character is no doubt a juvenile one, and the latter is very variable, the right and left wing of individual birds often differing in this respect.

Hartlaub's *L. sticturus* was founded on a Boubou from Lake Ngami and is also characterized by having three of the inner secondaries white-edged as well as white spots on the tail-tips. The latter character is not present in fully adult examples from the same locality, though the former seems to

be fairly constant, but the birds from Lake Ngami and the Victoria Falls district appear to average rather larger, the wings measuring 4·0 to 4·3 against 3·6 to 3·8 in birds from north Angola.

The examples of this Boubou in the British Museum are as follows:—

Angola—Cunene River (Andersson), Capangombe, Gambos (Anchieta), Benguella type (Monteiro), Catumbella, Hoxe, Malanji, N'Dalla Tondo, Dondo (Ansorge); *Portuguese Congo*—Landana (Petit); Lake Ngami (Chapman and Woosnam); Victoria Falls (Bradshaw). Examples from Katanga (Neave), and Karungwesi River near Lake Mweru (A. Sharpe), are intermediate between this and *L. mossambicus*.

Laniarius æthiopicus.

Turdus æthiopicus, Gmelin, S. N. ii. p. 824 (1788) *Abyssinia*.

Laniarius æthiopicus, Shelley, B. Afr. i. No. 724 (1896); Reichen. Vög. Afr. ii. p. 577 (1903); Sharpe, Handl. B. iv. p. 294 (1903); Neum. J. f. O. 1905, p. 222 *Shoa*; Erlanger t. c. p. 697 *Somaliland*; Butler, Ibis, 1905, p. 329 *Gallabat*, 1908, p. 226, 1909, p. 80 *Bahr el Ghazal*.

Dryoscopus æthiopicus, Gadow, Cat. B. M. viii. p. 139 (1883); Grant, Ibis, 1904, p. 265 *Harrar*; Witherby, Ibis, 1905, p. 519 *Somaliland*; Gurney, Ibis, 1909, p. 500 *B. E. A.*; Bannerman, Ibis, 1910, p. 302 *Somaliland*.

Laniarius æthiopicus æthiopicus, Zedlitz, J. f. O. 1910, p. 798 *Eritrea*.

Subspecies a. Laniarius ambiguus.

Lanius æthiopicus ambiguus, Mad. Mus. Nat. Hung. ii. p. 205 (1904) *Kilimanjaro*; Reichen. Vög. Afr. iii. p. 834 (1905); Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 115 (1910).

Subspecies b. Laniarius somaliensis.

Lanius æthiopicus somaliensis, Reichen. Vög. Afr. iii. p. 834 (1905); Erlanger, J. f. O. 1905, p. 697, *Umfudu S. Somaliland*.

Adult male. Above, including the crown and sides of the head, glossy black, a little duller on the wing quills; rump feathers whitish, with projecting fine hair-like barbs which are black, causing a spotted appearance

to the lower back of rather varying development; middle wing-coverts and generally the outer webs of the long secondary coverts white, forming a conspicuous wing bar, but no white on the secondaries; inner lining of the quills dusky black, under wing-coverts white with a patch of black towards the edge of the wing; below washed with rosy pink, paling to whitish on the chin and under tail-coverts. Iris brown; bill black, legs dark slate. Length 9·75 inches, culmen 0·9, wing 4·2, tail 4·1, tarsus 1·3. Lake Chercher, ♂, 12. 1. 99 (Lord Lovat).

Adult female. Resembles the male, but is smaller. Wing 3·8. Harrar, 3. 1. 02 (Degen).

A young bird has the bill more horny brown, especially on the lower mandible, and white on the tips of the outer tail-feathers.

L. ambiguus. Resembling *L. æthiopicus*, but generally smaller and with less white on the wing; only the middle row of coverts white and not the outer webs of the longer secondary coverts. Wing 3·65, Kilimanjaro, 1884 (Johnston). In other examples the wing varies from 3·4 to 4·0.

L. somaliensis. "Resembling *L. ambiguus*, but smaller. Wing 3·2 to 3·5" (Reichenow).

A few examples in the British Museum have a white edging to the secondaries; one labelled Bejook (Esher) has this on one wing only; another obtained by Donaldson Smith in Somaliland has white edges to two secondaries on both wings and is practically indistinguishable from *L. major*. There is also a good deal of variation in size, both individually and geographically. Those from Kilimanjaro appear to be the smallest, the wings seldom exceeding 3·6.

The Ethiopian Boubou ranges from Eritrea and Abyssinia through Somaliland and British East Africa as far as Kilimanjaro.

Gmelin's description was founded on the "Black and White Thrush of Abyssinia," of Buffon, the account of which was compiled from a drawing brought to Europe by the traveller Bruce; and it is in Abyssinia that it is best known, having been procured there by all the early travellers, including Rüppell, Brehm and Heuglin.

Blanford, who often met with it during the Abyssinian expedition of 1867-8, gives a long account of its habits as follows: "A lively and active bird and less skulking in its habits than most Bush Shrikes. The male has a most

melodious flute-like whistle, rarely single, generally of three or four notes, which must be familiar to every Abyssinian traveller. The answer of the female is a harsh note, something like that of a Common Shrike. Besides this, the bird has another call, like 'tuk-tuk-tuk-tatatatuk' quickly uttered. In January and February these Shrikes abounded, generally in families of four or five, in the pass leading to Senafé, between 3,000 and 4,000 feet. None were seen round Zuilla. In May they were common at a much greater elevation, even at 8,000 and 9,000 feet, near Senafé, where none were met with three months before. They were occasionally seen in Samhar around Ailet in July, and they abounded in the Anseba Valley. They thus appear to have a considerable range in altitude, being, however, most common at all periods of the year in the sub-tropical regions. They feed like other Bush Shrikes on various small insects picked off the leaves and stems. In July, near Kelamet in the Lebka Valley, I saw two couples of these birds together, engaged in a most extraordinary dance-like motion. They were sitting on small branches, moving their bodies up and down, as if curtsying to each other, the males meantime constantly repeating their flute-like notes, to which the females answered."

Butler states that he met with this species at Gallabat on the Sudan-Abyssinian frontier where it was quite common, and also in the Bahr el Ghazal, but examples from the last-named province in the British Museum must be referred to *L. major*.

In southern Abyssinia and Shoa it was procured by Lord Lovat and Pease, as well as by Degen, Neumann and Erlanger. The first-named (Ibis, 1900, p. 147), who obtained the bird at Lake Chercher, makes the following remarks on its voice: "The note of this bird meets the Abyssinian traveller's ear every day. The double call-note is caused by the male and

answering female, the call and reply being so rapid that unless one actually has both birds in sight one would hardly imagine that the reply of the female could be so instantaneous. In addition to the call-note the male whistles an octave on a descending scale, and the female utters the 'gurr' typical of the Shrike family. I am aware that my explanation of the double note is opposed to the observations of Rüppell and Blanford, but I state what I have myself observed."

Erlanger took a nest in an olive garden near Harrar on April 9, 1900, on which the female was sitting, but which contained as yet no eggs, though one was removed from the female. The nest was placed about six feet up in an olive tree; it was a flat structure built up entirely of rootlets.

Nearly all the collectors in Somaliland—Lort Phillips and Hawker, Hamerton and Bury—have also collected specimens of this Shrike and most of them have commented on the sweet, clear bell-like note of the male.

Farther south, in British East Africa, a good series was collected by Doherty for the Tring Museum in Kikuyu. Hartert, who examined them, found two out of the thirteen collected had traces of white edges to the secondaries.

Madarasz and Reichenow have distinguished subspecifically the Boubou of Kilimanjaro by the more restricted amount of white of the wing. An examination of the East African examples in the British Museum shows that this slight distinction generally, but by no means invariably, holds good, but the variation in dimensions is very considerable. I doubt whether it is possible to distinguish *L. somaliensis* from southern Somaliland as well. The examples of this latter was obtained by Erlanger at Umfudu on the lower valley of the Juba or Ganale River in south Somaliland.

The following examples of this species in the British Museum have been examined :—

L. æthiopicus: *Abyssinia*—Bogosland and Bezook (Esler), Sooroo and Waliko (Jesse), Anseba Valley and Senafé (Blandford), Lake Chercher (Lovat), Addis Abada (Welby), Let-Marefia (Antinori); *Somaliland*—Wagga (Lort Phillips), Jifa Uri and Jifa Medir (Hawker), Kaldash (Gillett), Harrar (Degen), Gum Libau (D. Smith), Upper Sheihk (Hamerton).

L. ambiguus: *British East Africa*—Kikuyu (Delamere), Kenya (Makinder), Kitui (Hinde); *German East Africa*—Kilimanjaro (Johnston, Hunter).

Laniarius bicolor.

Dryoscopus bicolor, Hartl. Orn. W. Afr. p. 112 (1857) *Gaboon*; Gadow, Cat. B. M. viii. p. 138 (1883).

Laniarius æthiopicus bicolor, Reichen. Vög. Afr. ii. p. 579 (1903).

Adult. Resembling very closely *L. guttatus*, but the inner secondaries entirely black or exceptionally with a trace of white only. Total length 8·2 inches, culmen 0·95, wing 4·0, tail 3·5, tarsus 1·4. *Gaboon* (Du Chaillu).

The *Gaboon Boubou* very closely resembles that of *Angola* but has lost the white edging to the secondaries. It was described by Hartlaub from an example in the Verreaux collection from *Gaboon* and appears to be confined to that region. There are two examples in the British Museum from Du Chaillu's and Walker's collection, while Reichenow records it from Tschintshoscho in Portuguese Congo, but examples from this district in the British Museum have strong white edges to the secondaries and appear to be more nearly allied to *L. guttatus*.

Laniarius turatii.

Dryoscopus turatii, Verr. Rev. et Mag. Zool. 1858, p. 304, pl. 7 *Senegambia*; Gadow, Cat. B. M. viii. p. 140 (1883).

Laniarius turatii, Shelley, B. Afr. i. No. 735 (1896); Salvadori Ann. Mus. Genova, xl. p. 771 (1901) *Farim*; Reichen. Vög. Afr. ii. p. 577 (1903).

Adult. Upper parts black throughout with a slight gloss on the back; no white on the wings; rump as in other species of the genus with sub-

terminal white spots on the fluffy decomposed feathers, giving a slightly spotted appearance to that part especially when the feathers are separated, below from the throat to the lower chest faint rosy pink, becoming paler on the abdomen, thighs and under tail-coverts; lining of the quills black, under wing-coverts and axillaries white with a patch of black near the edge of the wing. Iris dark brown, bill greenish black, feet greenish blue. Length 9.5 inches, wing 4.2, tail 4.4, culmen 0.95, tarsus 1.3. Gunnal, ♂, 29. 5. 09. (Ansorge). Wing of ♀ 3.95.

Turati's Boubou is a rare bird. The type, described by Verreaux many years ago and still preserved in the Turati Collection at Milan, remained unique until a second example was obtained by Fea at Farim, in Portuguese Guinea, for the Genoa Museum on April 11, 1900. More recently Dr. Ansorge during his visit to the same colony has collected a good series at Gunnal, four males and one female with nest and eggs. These are now in the British Museum and form the basis for this description. The nest is a flimsy structure of grass, stems, and fine rootlets, with two dried leaves in it which presumably formed the lining. It was placed in a bush at the junction of several forking branches about six feet from the ground. The eggs which were taken May 27, 1909, are two in number, hedge sparrow blue in colour and unspotted. They measure 1.0×0.75 .

Laniarius sublacteus.

Dryoscopus sublacteus, Cass. Pr. Philad. Ac. 1851, p. 246 *East Africa*; Gadow, Cat. B. M. viii. p. 140 (1883); Bannerman, Ibis, 1910, p. 690 *Takaungu*.

Malaconotus sublacteus, Cab. Deeken Reise, iii. p. 26 pl. iv. (1869).

Laniarius sublacteus, Shelley, B. Afr. i. No. 736 (1896); Reichen. Vög. Afr. ii. p. 576 (1903).

Adults. Upper parts, including the entire wing, black with a blue gloss; feathers of the scapulars generally, and always those of the lower back, have a subterminal white patch, and the white sometimes forms a bar next to the upper tail-coverts; under parts white with a rosy buff tinge caused by the more basal portion of the feathers of the lower throat and breast being

rich buff. Total length 7·5 inches, culmen 0·9, wing 3·4, tail 3·5, tarsus 1·20. Lamu (Kirk).

The sexes are alike. An immature bird has an outer edging and tip of white to the outer tail-feathers and buffy-white tips to some of the wing coverts.

The Zanzibar Boubou inhabits East Africa from the neighbourhood of Lamu and the Tana River south to Dar-el-Salaam and Zanzibar island. It does not appear to extend very far into the interior; though met with by Fischer at Komboko and Gros Aruscha, both localities not far from Kilimanjaro; but the Boubous which I have examined from that neighbourhood, obtained by Johnston and Hunter, must be referred to *L. æthiopicus ambiguus*.

The type described by Cassin is stated doubtfully to have come from East Africa. On Zanzibar Island the species appears to be common, both Böhm and Fischer met with it there, while the last named also noticed it at many other localities from the Tana River to Bagamoyo on the coast of the mainland. He further states that it is known as "Migo" at Zanzibar and inhabits thick bush and that its flutelike and clear cry consists of three notes, which is generally answered by the female. He found the species nesting in May on Zanzibar Island. The nest was constructed of rootlets and the fibre of the cocoa-nut, and was placed from 9 to 12 feet from the ground in the crotch of a thick mango tree. The eggs, two in number, were pale greenish blue with lavender grey and dark brown irregular blotches, chiefly at the thick end; they measure 0·85 × 0·65.

The British Museum has examples of this species from Lamu and Melindi (Kirk), Takaungu (Percival), Mombasa (Handford), all on the coast of British East Africa; from Zanzibar Island (Fischer) and Ugogo (Kirk), in the interior of German East Africa.

Laniarius atroflavus.

Laniarius atroflavus, Shelley, P. Z. S., 1887, p. 124, pl. 13 *Cameroon*;
id. B. Afr. i. No. 731 (1896); Reichen. Vög. Afr. ii. p. 586 (1903);
id. Mitt. Zool. Mus. Berl. v. p. 222 (1911).

Adult male.—Upper parts glossy black, feathers of the lower back fluffy, and some of them with large rounded white subterminal spots, more or less hidden by the overlaying black feathers; the last feathers of the rump with broad buffish ends, forming a band at the base of the tail; under parts deep yellow, paler on the upper half of the throat and chin, changing to rufous buff between the thighs and on the under tail-coverts; outside of thighs black; axillaries yellow, under wing-coverts buffy white, with a black patch towards the edge of the wing. "Iris brown, bill black, legs grey" (Preuss). Total length 7.0 inches, culmen 0.7, wing 3.3, tail 2.8, tarsus 1.1. Mann's Spring, type, 10.86 (Johnston). The female is like the male, wing 3.1.

Immature.—Has the back greyish and less black, and the two pairs of outer tail-feathers, and some of the greater-coverts have yellow tips.

The Yellow-breasted Boubou is confined to Cameroon. It was first taken by Sir Harry Johnston in October, 1886, at Mann's Spring, at an elevation of 7,300 ft. on the Peak of Cameroon. Subsequently it was obtained by Preuss at Buea, "the highest inhabited village" on the peak, and by Knutson and Valdau, for the Stockholm Museum, at the same place as Johnston.

The British Museum, in addition to the pair originally brought home by Johnston, contains a series of two males, two females, and an immature female, collected by Alexander, March 28-30, 1909, also on the Peak of Cameroon.

Reichenow has recently recorded the species from Bamenda, and the Genderu Mountains in the interior of Cameroon.

Laniarius barbarus.

Lanius barbarus, Linn. S. N. i. p. 137 (1766) *Senegal*.

Laniarius barbarus, Gadow, Cat. B. M. viii. p. 153 (1883); Shelley, B. Afr. i. No. 730 (1896); Reichen. Vög. Afr. ii. p. 588 (1903).

Malaconotus barbarus, Swains., Zool. Ill. Ser. 2, ii. pl. 71 (1831); id. B. W. Afr. i. p. 243, pl. 24 (1837).

Le Gonolek, Levaill. Ois. d'Afr. ii. p. 78, pl. 69 (1799).

Adults.—Forehead, crown and nape dull yellow with a greenish tinge; remainder of the upper parts glossy black, with many of the feathers of the scapulars and lower back submarginally white; under surface of wings uniform black; chin, throat and breast vermillion; thighs, lower abdomen and under tail-coverts rufous buff. Iris pale yellow; bill and feet black. Total length 8·5 inches, culmen 0·85, wing 3·8, tail 3·8, tarsus 1·25. Accra (Shelley).

Nestling.—Forehead and crown dull yellow, as in the adults; remainder of the upper parts black, with yellowish tips to some of the feathers; under parts yellowish buff, with numerous dusky bars on the breast, and a tinge of vermillion on the upper throat and centre of the abdomen. Gambia (Whiteley).

The Gonolek ranges from Senegal to Lagos on the West Coast, and inland through Northern Nigeria to Lake Chad.

It was first discovered by the French traveller, Adamson, in Senegal, and sent to M. de Reamur. On this bird the descriptions of Brisson and Linnæus were founded.

In the neighbouring colony of the Gambia it was obtained by Rendall and Budgett, and in Portuguese Guinea by Barahone for the Lisbon Museum, by Fea for the Genoa Museum, and Ansorge for the British Museum.

During my visit to the Gold Coast Colony in company with Mr. T. E. Buckley, we found this bird very abundant throughout the district from Cape Coast to Accra, and the Aguapim Mountains; it was conspicuous alike for its pleasing notes and its bright red breast. Governor Ussher, who also met with this Shrike as far along the coast as Lagos, states: "It frequents low bushes, and is very active during the whole day in its pursuit of large insects, beetles and caterpillars. It very probably attacks nestlings, but is too slow in its movements to attempt full-grown birds. The male and the female during the breeding season may be frequently observed pursuing each other over and among the low shrubs, uttering a short harsh cry.

Alexander found it along the Upper White Volta, and

writes: "This beautiful Bush-Shrike haunts thick undergrowth on the banks of the Volta River, being distributed in pairs from source to mouth. We never found it in any other locality, and it is essentially a river-loving species. In April it was breeding. From two of the specimens obtained we took out complete eggs. At that time the male birds were very noisy, uttering at short intervals, throughout the heat of the day, their loud peculiar notes, like the clang of a broken bell, which was often followed by a whirring noise made by the wings."

In the neighbouring German Colony of Togoland, the Gonolek was taken by von Zech and Kurtz for the Berlin Museum, and in Dahomey by Newton for the Lisbon Museum. Inland in Northern Nigeria it appears to be widely distributed (Hartert) from the Niger to the western shores of Lake Chad, while east and south of that lake its place is taken by *L. e. chrysostictus*.

The following is a list of the examples in the British Museum: *Senegal*—St. Louis and Rufisque (Laglaize); *Gambia Colony*—(Hopkinson, Moloney and Whiteley); *Portuguese Guinea*—Gunnal, Oeo, and Port Marsoa (Ansorge); *Gold Coast*—Accra (Shelley and Buckley), Fantee (Higgins and Ussher), Volta (Ussher and Alexander); *Northern Nigeria*—Shonga (Forbes), Illorin (Bryant), Lokoja (Christy), Amagaddi and Yo on Lake Chad (Alexander).

Laniarius mufumbiri.

Laniarius mufumbiri, Ogilvie-Grant, Bull. B. O. C. xxix. p. 30 (1911), Ibis, 1912, p. 332, pl. 6, *Vichumbi*.

Adult.—Closely resembling *L. barbarus* but smaller, and with the median wing-coverts broadly tipped with white; and the thighs, vent and under tail-coverts whitish buff instead of ochraceous. Iris lemon-white, bill and inside of mouth black, feet grey. Total length 7·5 inches, wing 3·6, tail 3·3, culmen 0·95, tarsus 1·3. Type (Mrs. Roby).

The Mufumbiro Gonalek, recently described, is only known from the volcanic district between Lakes Albert Edward and Kivu, where Uganda, the Belgian Congo, and German East Africa meet. The type, an adult, was procured by Mrs. Roby near Vichumbi, at the south end of Lake Albert Edward on December 4, 1910, and is now in the British Museum. A second specimen, apparently not quite adult, was collected by Mr. T. V. Fox near Ruchuduru, Ruchigga, on July 9, 1911, and is in his collection.

Laniarius atrococcineus.

Lanius atrococcineus, Burch. Trav. S. Afr. i. p. 387 (1822) *Junction of Vaal and Orange Rivers*.

Malaconotus atrococcineus, Burchell, Zool. Journ. i. p. 461, pl. xviii (1825).

Laniarius atrococcineus, Gadow, Cat. B. M. viii. p. 152 (1883); Shelley, B. Afr. i. No. 727 (1896); Stark and W. Sel. Bds. S. Afr. ii. p. 31 (1901); Reichen. Vög. Afr. ii. p. 587 (1903); Oates and Reid, Cat. B. Eggs, B. M. iv. p. 292, pl. xiii. fig. 7 (1905); Chubb, Ibis, 1909, p. 160; id. J. A. S. Afr. Orn. Union, 1909, p. 68 *Bulawayo*.

Laniarius atrocroceus, Trimen, P. Z. S. 1880, p. 623, pl. 59; Shelley, B. Afr. i. No. 728 (1896).

Adults. Upper parts mostly black, with a blue gloss on the head, neck and back, and a greener gloss on the wings and tail; feathers of the lower back subterminally white; median wing-coverts, and broad edges to three of the greater wing-coverts and three of the secondaries, pure white, forming a conspicuous longitudinal wing-band; under parts bright crimson, with the thighs and the under wing-coverts black; under surface of the quills slightly browner, with a silvery gloss on their inner edges. "Iris brown; bill and feet black." Total length 8·5 inches, culmen 0·85, wing 4·0, tail 4·2, tarsus 1·20. Ramaqueban River, ♂, 5. 9. 73 (Buckley). The female is smaller; wing 3·75, Rustenburg (Lucas).

Nestlings. Upper parts black, barred on the crown and back with brownish white, and mottled, more irregularly, with white on the wing-coverts; under parts ashy-white, barred with dusky-black; under tail-coverts and a few feathers on the breast crimson. Palachwe (Jameson).

Burchell's Gonalek ranges from the Victoria Falls district and from the interior of the Mossamedes province of Angola south to the Orange River.

It was first met with by Burchell near the junction of the Orange and Vaal Rivers in what is now Griqualand West. He writes: "This bird inhabits the woods along the rivers Gariep and Kygariep; and it has also been met with in the country of the Bachapins, near the River Kruman, at a spot which I have designated on the map by the name of Mokäla-Grove, where the large and beautiful trees of *Acacia giraffæ* (Mokala) are the resort of many handsome and rare species. . . . During my residence in the town of Litakun, I obtained the Bachapin names of a considerable number of birds; and that which was given to the present species, was 'Korrokoa.'"

The type locality is about the most southern point of its range; north of this it is spread over the western half of the Transvaal to the neighbourhood of Pretoria, whence it is recorded by Distant and Penther. In the Rustenburg district and the Magaliesberg Mountains it has been reported by Ayres and Barrett as well as in the bordering districts of Bechuanaland; Bradshaw and Chubb found it in Matabeleland, whence it extends north to the Victoria Falls. Chubb writes: "Not uncommon, but shy and seldom seen. Its bright red under parts render it a very conspicuous object in the bush. Occasionally it descends to the ground to feed; in the stomach of one thus shot were found ants, beetles and caterpillars."

Of German South-west Africa Andersson writes: "This brilliant coloured Shrike is pretty generally dispersed over Damara and Great Namaqualand and also over the Lake regions. It is usually found either singly or in pairs and is a wary bird, frequenting both open woods and dense thickets, but preferring the latter. In such localities it searches

industriously for insects and their larvæ, and, while thus occupied, occasionally utters pleasant clear ringing notes, but with the prelude of a harsh guttural sound. This species builds its nest in the fork of a tree, constructing it roughly of the inner bark of trees, with a few grasses interlaced, but without any softer lining. I have found the nest in the more northern parts of Damaraland as early as November; but one which I met with at Omapja contained two fresh eggs on January 8."

North of the Cunene River in the Mossamedes province of Angola specimens were collected by Anchieta at Huilla, Gambos, Kiulo and Humbe, all on the high plateau of the interior.

Laniarius atrocroceus was founded by Trimen on a Shrike shot by the late Dr. Bradshaw on the Upper Limpopo sixty miles south-east of Shoshong. It resembles in every respect *L. atrococcineus*, except that the under parts are a rich yellow instead of crimson. Only the single example now in the South African Museum is known; and as it was obtained in the country where the red-breasted form commonly occurs, there can be hardly any doubt that it is a variation or mutation and not a distinct species.

Two eggs in the British Museum, taken by Andersson at Otjimbinque in Damaraland, are of regular oval shape and moderately glossy. They are cream coloured, spotted and blotched with pale brown and lavender, more thickly at the broader end. They measure 0.94×0.7 and 0.91×0.65 .

There are examples of this species in the British Museum from the following localities: *Cape Colony*—Vryburg and Kuruman (Woosnam); *Bechuanaland*—Palachwe (Jameson), Bamangwato (Buckley); *Transvaal*—Rustenburg (Lucas), Crocodile River and Elands River (Oates); *S. Rhodesia*—Makalaka country and Zambesi Falls district (Bradshaw); *German*

S.-W. Africa—Otjimbinque and Otniovapa (Andersson);
Angola—Gambos (Anchieta).

Laniarius erythrogaster.

Lanius erythrogaster, Cretzm. in Rüpp. Atlas, Vög. p. 43, pl. 29 (1826).

Laniarius erythrogaster, Gadow, Cat. B. M. viii. p. 154 (1883); Shelley, B. Afr. i. No. 729 (1896); Reichen. Vög. Afr. ii. p. 586 (1903); Neum. J. f. O. 1905, p. 223 *Upper Sobat Valley*; Butler, Ibis, 1905, p. 329, 1908, p. 227, 1909, p. 81 *Sudan*; Jackson, Ibis, 1906, p. 551 *Toro*; Ogilvie-Grant, Ibis, 1907, p. 589 *White Nile and Sobat*; id. Trans. Zool. Soc. xix. 1910, p. 340, pl. xix. fig. 22, egg, *Ruwenzori*; Zedlitz, J. f. O. 1910, p. 799 *Eritrea*; Reichen. Deutsch. Zentr. Afr. Exped. iii. 1910, p. 313 *Albert Edward Region*; Koenig, Ber. V. Intern. Orn.-Kongr. 1910, p. 511 *White Nile*.

Malaconotus wernei, Cat. Mus. Hein. i. p. 69 (1850) *Upper Blue Nile*.

Laniarius chrysogaster, Bp. Consp. i. p. 360 (1850).

Subspecies a. Laniarius chrysostictus.

Laniarius erythrogaster chrysostictus, Reichen. Orn. Monatsb. 1910, p. 95 *Adamawa*; id. Mittl. Zool. Mus. Berl. v. p. 222 (1911).

Adult male. Upper parts glossy blue-black, the wings and tail entirely black, both above and beneath; lower back, with large subterminal white bars to the feathers; chin, throat and breast vermilion; thighs, lower abdomen and the under tail-coverts yellowish-buff; flanks black mottled with white. "Iris, white or pale yellow, bill and feet black." Total length 9·0 inches, culmen 0·9, wing 4·0, tail 4·0, tarsus 1·15. Shebesha, White Nile, ♂, 24. 4. 00 (Witherby). The female is slightly smaller, wing 3·8. Kaka (Hawker).

Immature. Has traces of buffy yellow feathers on the crown, and probably had the whole crown that colour, also traces of tawny tips to the coverts; feet ashy grey. Gos-Abu-Guma (Hawker).

L. e. chrysostictus differs in having a few white spotted feathers on the shoulders which have yellow and red ends instead of black. This subspecies was recently described by Reichenow from Dodo and Tchamba in Adamawa in the interior of Camaroon, where it was procured by Riggenschach.

The Abyssinian Gonalek ranges from Eritrea and Senaar south to Victoria Nyanza and the eastern slopes of Ruwenzori and west through the Bahr el Ghazal to the eastern shore of Lake Chad and to Adamawa in the interior of Camaroon, but it does not reach the highlands of Abyssinia or Shoa.

Some of the examples of this species from Uganda and

Ruwenzori show traces of yellow on the shoulders, and should be perhaps referred to Reichenow's new subspecies, together with those obtained by Alexander in French Congoland.

The species was originally discovered by Rüppell in "Eastern Abyssinia and Kordofan." Heuglin met with it commonly in pairs along the Blue Nile and in Kordofan, but always in thick bush along the rivers. Koenig during his recent journey up the White Nile from Khartum to Redjaf found it everywhere a most characteristic and common bird; he compares its melodious note to that of an oriole. Several of his specimens showed traces of the yellow tips to the shoulder-feathers, characteristic of Reichenow's subspecies from the Camaroon, and he believes that it is merely a character of a fully adult male bird. The most northern locality I have found for this bird is Jebel Maman on the road from Suakim to Kassala, where it was met with by Butler, while Zedlitz has recently observed it at Scetel, Mansura, and on the Takase River in Eritrea, and gives some account of its habits. Along the White Nile it has been noticed by Hawker, Witherby and others from Shebesha near El Dueim southwards, and there are a number of specimens from the Sobat tributaries in the British Museum presented by Macmillan. Donaldson Smith procured two examples on the Omo River, north of Lake Stephanie, and round the shores of Victoria Nyanza it has been collected by Jackson at Entebbe, by Neumann in Karivondo, by Fischer at Kagehi, and by Emin at Bussisi. There is a large series obtained by the Ruwenzori Expedition, where it was abundant in the acacia country at the south end of the range and in the Semliki valley, but it was never seen on the mountain itself.

To the westward Butler states that it is a common bird in the Bahr el Ghazal, and further west it was obtained by Alexander on the Ba Mingui River in French Congo, and at Djimtilo, where the Shari enters Lake Chad.

This Gonalek is found almost always in the thorn and other bush, growing along river beds and dry watercourses; it is shy, and notwithstanding its conspicuous plumage manages to conceal itself very well. It is nearly always in pairs, and the unmistakable call and answer of the two sexes has been noticed by nearly all collectors. That of the male is a clear, loud and flute-like "huied," while the answer of the female is snarling "ter-er-er-er." According to Heuglin the food consists of worms, caterpillars and insects.

Two eggs of this species were procured by Woosnam at Mokia, near Ruwenzori, on May 11, 1906. They are rather pointed and somewhat glossy. The ground colour is pale blue spotted and blotched with umber brown and lilac grey, the markings being most numerous at the larger end. Both measure 0.9×0.7 .

The following is a list of the examples of this species in the British Museum:

L. erythrogaster erythrogaster: *Abyssinia*—Bogosland (Esler), Farmaka on the Blue Nile (Lovat); *Egyptian Soudan*—Shebesha, Kawa, Gos-Abu-Guma, Renk, Kaka, Fashoda, Taufikia, all on the White Nile (Hawker, Zaphiro, Witherby and Dunn), Sobat and Baro rivers (Zaphiro), Mursu country near Lake Rudolf (Smith), Lake No (Best), and Jur Guttas (Bohndorf) in the Bahr el Ghazal.

L. erythrogaster chrysostictus: *Uganda*—Elgeyu, Butiaba and Kawa Island (Jackson), Hoima road (Christy), near Entebbe and Mokia (Ruwenzori Expedition); *French Congo*—Ba Mingui, Fort Archumbault and Djimtilo on Lake Chad (Alexander).

Laniarius funebris.

Dryoscopus funebris, Hartl. P. Z. S. 1863, p. 105 *Maninga*; Gadow, Cat. B. M. viii. p. 133 (1883); Ogilvie-Grant, Ibis, 1904, p. 265 *Abyssinia and Somaliland*; id. Ibis, 1905, p. 203 *Burumba*; Gurney, Ibis, 1909, p. 500 *Kibwesi*; Bannerman, Ibis, 1910, p. 302 *Somaliland*, p. 690 *Kilimanjaro*.

Laniarius funebris, Finsch and Hartl. Vög. Ost-Afr. p. 352, pl. 4, fig. 2 (1870); Shelley, B. Afr. i. No. 734 (1896); Reichen. Vög. Afr. ii. p. 574 (1903); Neum. J. f. O. 1905, p. 222 *Shoa*; Erlanger, *t. c.* p. 696 *Somaliland*; Sjöstedt, Kilimandjaro-Meru Exped. i. p. 114 (1910).

Rhynchastatus lugubris, Cab. J. f. O. 1868, p. 412; id. Decken's Reis. iii. p. 26, pl. 7 (1869) *East Africa*.

Laniarius funebris rothschildi, Neumann, J. f. O. 1907, p. 595 *Sagan River, S. Shoa*.

Adult. Deep slate-blue above and below, shading into black on the head, wings and tail; feathers of the lower back with subterminal white patches; under surface of quills dark brown, with paler inner margins. "Iris dark brown; bill and feet black." Total length 8.25 inches, culmen 0.85, wing 3.5, tail 3.4, tarsus 1.1. Gessima River, ♂, 23. 1. 00 (Lord Delamere). The female is smaller, wing 3.3 (Lord Delamere).

Immature. Has tawny edges and tips to some of the wing-coverts and traces of transverse bands of tawny and dusky above and below, especially of the upper and under tail-coverts. Ukamba, ♂, juv. (Jackson).

The Slate-coloured Boubou ranges from Shoa south through Somaliland and East Africa to the Nyasa-Tanganika plateau; westwards it has been met with in Ankole to the west of Lake Victoria.

The type of the species was collected by Speke during his well-known expedition with Grant in 1860, at Maninga in the Unyamvesi country, now in German East Africa. He rather happily called it the "Black Metal-toned Whistler." About the same time another, but a much smaller individual, the wing of which only measured 78 mm. (3.1) against 99 mm. (3.8) was sent to Europe by Baron von der Decken, and described by Cabanis as *Rhynchastatus lugubris*. Reichenow has since shown that there is considerable variation in size among individuals, and that the types of the two species appear to have been extremes.

In Shoa this bird was procured by Antinori and Ragazzi for the Genoa Museum, and by Lord Lovat, Harrison and Pease at various localities between Addis Ababa and the

coast. It is equally plentiful in Somaliland, both north and west, whence there is a large series in the British Museum.

On an individual from the Sagan Valley, between Lakes Stephanie and Margarita, Neumann has founded a new subspecies which he states differs from that of East Africa proper, in the absence of white from the rump, but I must confess that I have not found this to be the case, either with an example collected by Donaldson Smith on Lake Stephanie or with others from Shoa.

Further south Jackson met with this species in the Mount Elgon country, Doggett to the west of Victoria Nyanza in Ankole, Gurney at Kibwezi in British East Africa, and Hunter and Percival and the Swedish Kilimanjaro Expedition in the neighbourhood of that mountain. Fischer and many other German collectors have obtained it in various localities in German East Africa, while the extreme southern point of its range appears to lay "north of Lake Nyasa," whence it was procured by Sir A. Sharpe.

All observers have noticed the striking and characteristic notes of this bird; Fischer states that the male first gives a triple, clear flute-like note of three tones, which is immediately answered by the female with one. Böhm says the male begins with three full, deep notes like those of a bell-glass, "tunk-tunk-tunk," to which he sometimes adds an exulting "rö-a," while the female answers him with a snarling "ürr" or "hüerr."

The birds are nearly always in pairs, and are usually found in the dry acacia-covered plains of East Africa, where they keep well hidden in the thick bush.

Erlanger found a nest on April 4 in the Gurre country of Somaliland; it contained two young birds just hatched and an egg just on the point of hatching; it was situated in a bush into which had grown a climbing euphorbia, and

was well in sight. It was small and flat, and constructed of rootlets and strips of bark. The egg was somewhat glossy, pale blue with fine speckling of pale brown, and some lavender scale-like spots at the thicker end; it measured about 0.90×0.65 .

The following is a list of the localities whence the British Museum has received examples of this species: *Southern Abyssinia*—Ketchen Waha (Lord Lovat), Daira Aila (Degen), and Melkadegaga (Pease); *Somaliland*—Goolis Foothills and Sheikh Pass (L. Phillips), Kokolo (Gillett), Hirabon, Gale Dabal (Degen), Las Man (Pease), Burao, Wagar and Dubar (Bury); Lake Stephanie (D. Smith); *Uganda*—Burumba in Ankole (Doggett); *British East Africa*—Gessima River, Kenya and Kedong River (Delamere), Ukambani (Ansorge), and Ukamba (Hildebrandt); *German East Africa*—Kilimanjaro (Hunter and Percival), north of Lake Nyasa (Sharpe).

Laniarius alboplagatus.

Dryoscopus alboplagatus, Jackson, Bull. B. O. C. xvi. p. 90 (1906)
Doingo Narok.

Adult female. In every respect identical with *L. funebris*, but with a large triangular white spot on the throat. Length 7.3 inches, culmen 0.85, wing 3.25, tail 3.3, tarsus 1.2.

This species is founded on a unique specimen, and is probably nothing but an individual variation in the direction of albinism. It was discovered by Mr. Jackson at Doingo Narok in British East Africa.

Laniarius erlangeri.

Laniarius erlangeri, Reichen. Vög. Afr. iii. p. 834 (1905) *Umfudu*;
Erlanger, J. f. O., 1905, p. 697.

Adult male. Black above and below, rather more glossy on the upper part of the head, and with white subterminal markings on the feathers of the lower back, and the inner lining of the quills slightly whitish. Bill

and legs black in the dried skin. Total length 8.0 inches, culmen 0.90, wing 3.5, tail 3.7, tarsus 1.2. Umfudu, ♂, type, 24. 6. 01 (Erlanger).

Erlanger's Black Boubou was named after the discoverer by Reichenow. It is only known from the two original male examples obtained at Umfudu, on the Juba River, about 75 miles from its mouth in south Somaliland, on June 16 and 24, 1901; these, through the courtesy of Carolina, Baroness von Erlanger, I have been able to examine.

Laniarius nigerrimus.

Dryoscopus nigerrimus, Reichen. Orn. Centralb. 1879, p. 120 *Kipini*.

Laniarius nigerrimus, Shelley, B. Afr. i. No. 733 (1896); Reichen. Vög. Afr. ii. p. 573 (1903).

Adult. Black, with a greyer tinge on the lower back and breast and with a slight gloss; rump with the soft feathers grey basally with black tips, but without or with only traces of the white subterminal markings; tail longer than the wing. Iris reddish brown; bill black, feet slate-grey. Total length 8 inches, culmen 0.85, wing 3.3, tail 3.4, tarsus 1.25. Lamu (Kirk).

This Boubou was first discovered by Fischer at Kipini, near Lamu on the coast of British East Africa. I have two examples of the species, procured for me by Sir John Kirk at Lamu. These are now in the British Museum. Reichenow doubtfully refers to this species a Boubou obtained by Emin at Loramo, in the Nile Province of Uganda.

It can be easily distinguished from *L. holomelas* by its grey rump and its proportionately longer tail.

Laniarius leucorhynchus.

Telephonus leucorhynchus, Hartl. Rev. Zool. 1848, p. 108 *Elmina*.

Laniarius leucorhynchus, Hartl. Beitr. Orn. West Afr., 1850, p. 51, pl. 6; Shelley, B. Afr. i. No. 732 (1896); Reichen. Vög. Afr. ii. p. 573 (1903); Sharpe, Handl. B. iv. p. 295 (1903); id. Ibis, 1904, p. 91; 1908, p. 331 *Cameroon*; Kemp, Ibis, 1905, p. 235 *Bo*; Ogilvie-Grant, Trans. Zool. Soc. xix. p. 344 *Ruwenzori*; Reichen. D. Zentr.

Afr. Exped. iii. p. 312 (1910); id. Mittl. Zool. Mus. Berlin v. p. 82
Rio Benito.

Dryoscopus leucorhynchus, Gadow, Cat. B. M. viii. p. 132 (1883).

Laniarius carbonarius, Cass. Proc. Philad. Acad. 1851, p. 347 (1852)
Sierra Leone.

Adult male. Entire plumage sooty black with only a very slight gloss; no subterminal white spots on the rump. Iris reddish brown, bill and feet black. Total length 9.5 inches, culmen 1.0, wing 3.9, tail 3.7, tarsus 1.17. River Ja, ♂, 4. 4. 06 (Bates).

Female. Slightly less glossy black with a tinge of brown. Bill black, wing 3.6. Efulen, ♀ (Bates).

Immature. Still more brownish, and the bill at first quite ivory white, changing gradually to black.

The Sooty Boubou ranges from Sierra Leone to Gaboon on the west coast and extends inland through the Belgian Congo as far as the Semliki Valley and Ruwenzori.

The type was obtained at Elmina on the Gold Coast by Weiss and being a young bird with a white beak was given by Hartlaub the name "*leucorhynchus*." An examination of the series in the British Museum, especially those obtained from Camaroon by Bates, shows plainly that it is the young and not the old birds, as was believed by Reichenow, which have the beak so coloured.

From Sierra Leone McDowell sent an example of this bird to Cassin; he described it afresh as *L. carbonarius*, as it had a black bill. From this colony it has also been obtained by Robin Kemp. Buttikofer met with this species at several localities in Liberia, and Governor Ussher and Blissett in the Gold Coast Colony. In Camaroon it has been collected by Reichenow himself in the low country and by Preuss, Crossley, and Knutson and Valdau on the Peak of Camaroon, while there is a good series of various ages and sexes sent to the British Museum by Bates from Efulen and the Ja River.

Further south from Gaboon in French Congo, du Chaillu

collected examples on the Camma, Ogobai and Moondi rivers and Falkenstein in Portuguese Congo, while in the interior of the Belgian Congo it was met with by Bohnsdorff at Leopoldville, by Jameson at Yambuya on the Aruwimi, by Emin at Bundeko in the Mombattu country and by Woosnam at Fort Beni in the Semliki Valley. These last are at the most eastern limits of its range.

Bates states that "the Sooty Blackbird lives in the thick tangled growth of old garden-clearings, hiding when an intruder comes near and scolding with a noise as loud as that of cats fighting."

Buttikofer (Notes, Leyd. Mus. 1885, p. 183) found a nest of this species (which he at first wrongfully identified as that of *Melaenornis edolioides*) on October 29, in a swamp behind the beach at Robertsport in Liberia. It much resembled a dove's nest in size and shape and was constructed of thorns and twigs and lined very sparingly with small roots, which were just sufficiently thick to prevent the eggs from dropping through. It was placed in the fork of a shrub and about 3 feet from the surface of an almost inaccessible swamp. The eggs, two in number, were greenish grey, closely covered with irregular, obscure, ochraceous brown spots, and measured 1.0×0.7 .

The series in the British Museum contains examples from the following localities: *Sierra Leone*—Bo (Kemp); *Gold Coast Colony*—Commendah (Blissett), Fantee (Ussher); *Cameroon*—Cameroon Mountain (Crossley), Efulen and River Ja (Bates); *French Congo*—Como River (Bates), Gaboon River (Ansell and Walker), Kembu Mobbai and Bwando rivers along the Ubangwe (Alexander); *Belgian Congo*—Yambuya (Jameson), Fort Beni (Ruwenzori Expedition), Garuba River and Gudima in the Mombattu country (Alexander).

Laniarius holomelas.

Dryoscopus holomelas, Jackson, Bull. B.O.C. xvi. p. 90 (1906) *Ruwenzori*; id. Ibis, 1906, p. 551; Ogilvie-Grant, Trans. Zool. Soc. xix. p. 343 (1910) *Ruwenzori*.

Laniarius holomelas, Reichenow, D. Zentr. Afr. Exped. iii. p. 312 (1910).
Laniarius melas, Reichen. Orn. Monatsb. 1908, p. 47 *Rugege Forest, Lake Kivu*.

Adult. Closely resembling *L. leucorhynchus*, but smaller throughout, and with a shorter bill; the black of the plumage has a distinct ashy shade, as compared with the purplish shade of the larger bird. Iris brown; bill and feet black. Total length 7·2 inches, wing 3·2, tail 2·75, culmen 0·9, tarsus 1·2. Ruwenzori, type, ♂, 21. 2. 02 (Archer).

Jackson's Sooty Boubou is confined to the region round the Ruwenzori Mountains and Lake Kivu. It was discovered by Geoffrey Archer, who made a journey to Ruwenzori in 1902 in order to collect birds for F. J. Jackson. He obtained three examples, two of which are now in the British Museum. It was subsequently met with by the members of the Ruwenzori Expedition in the Mubuku and Butagu valleys on the east and west sides of the mountain. R. B. Woosnam, one of the members of the expedition, writes as follows: "This Black Bush Shrike was found on Ruwenzori at elevations of from 6,000 to 9,000 ft. It is really a bird of the forest-zone, but it is occasionally met with lower down as well as in the bamboo-zone above. It has the most marvellously versatile range of notes it is possible to imagine. From the depth of some tangled mass of creepers one might hear, first a low harsh scraping or chattering sound, followed by some of the most beautiful flute-like notes. After a moment or two of silence an extraordinary clicking sound would commence (such a sound as made by bending and letting fly the tip of a strong quill toothpick), followed by a succession of quick, high-pitched piping notes. A search for the performer usually resulted in finding nothing, so cunning were these birds in

sneaking away through the undergrowth without being seen, and it was some time before we discovered the author of these strange noises."

Grauer collected this species in the same neighbourhood as well as in the forest of Rugege east of Lake Kivu.

As an undoubted example of the larger *L. leucorhynchus* was also obtained by the Ruwenzori Expedition in the Semliki Valley, it seems best at present to leave the two forms as separate species, though the differences between them seem to be hardly more than subspecific.

Laniarius poensis.

Dryoscopus poensis, Alexander, Bull. B.O.C. xiii. p. 37 (1902)
Fernando Po.

Laniarius poensis, Reichen. Vög. Afr. ii, p. 725 (1903); Alexander, Ibis, 1903, p. 360.

Adult male. Entire plumage glossy jet-black, with a slight steely-blue gloss less marked on the thighs and abdomen. Iris bluish black; bill and feet black. Total length 7·25 inches, culmen 0·75, wing 3·2, tail 2·65, tarsus 1·15. St. Isabel, Fernando Po, type ♂, 25. 11. 02 (Alexander).

Female. Is slightly smaller and less glossy; wing 3·0, tail 2·5 (Alexander).

The Fernando Po Boubou is confined to that island. It was discovered by Captain Boyd Alexander during his visit there in 1902. It is most closely allied to *L. holomelas*, from which it would be quite difficult to distinguish it. It is perhaps a little more glossy and black and in this respect resembles *L. leucorhynchus*, but it is much smaller than the last named.

Alexander writes: "We found this Shrike locally distributed in the vicinity of the Peak, from a height of 4,000 feet upwards. My collector also obtained it at Moka. It is a shy bird, resorting to the tops of the tall mountain trees and to the thickest brushwood, when it is more often heard than

seen, uttering peculiar ventriloquial croaks in a constantly varied tone."

Alexander collected six examples at Mount St. Isabel, Moka, and near Bakaki, all of which are now in the British Museum. There are also six additional specimens collected by Seimund at North Banterbari in the same island in 1904. None of these show any trace of the white bill so characteristic of the young of the allied *L. leucorhynchus*.

Laniarius fülleborni.

Dryospopus fülleborni, Reichen. Orn. Monatsb. 1900, p. 39 *Usafua*.

Laniarius fülleborni, Reichen. Vög. Afr. ii. p. 573 (1903).

Laniarius murinus, Reichen. Orn. Monatsb. 1901, p. 101 *Muhanga*; id. Vög. Afr. ii. p. 574 (1903).

Adult male. Black throughout above and below, darkest on the head and throat, including the ear-coverts, more ashy on the back, breast, wings and tail; rump feathers the same colour throughout, not subterminally grey as in *L. nigerrimus*; tail shorter than the wing. Total length 9·0 inches, wing 3·4, tail 3·2, culmen 0·8, tarsus 1·2. Karonga, ♂ (Whyte).

Female immature. Dark mouse-coloured brown above, rather paler below and slightly freckled; dimensions about as in the male. Nyasaland, ♀ (Sharpe).

The Nyasaland Boubou has only been met with in the highlands round the north end of Lake Nyasa. Reichenow described the type obtained by Fülleborn at Usafua north of Lake Nyasa, and the following year another bird from the north-east of Lake Nyasa of a paler and browner colour which he named *L. murinus*. The British Museum has one specimen collected at Karonga on north shore of Lake Nyasa by Whyte which is without doubt referable to this species, and two more without definite locality, but from the same region, collected for Sir Alfred Sharpe. Of this latter pair one marked ♀ agrees very well with the description of *L. murinus* and appears to me to be an immature example of *L. fülleborni*.

Resembling in most respects *Laniarius*, but the rump feathers white or grey, and contrasting with the black or blackish mantle; wing rounded, the fourth to seventh primaries the longest; tail rounded, generally a little shorter than the wing; plumage black and white with some sandy buff but no bright colours; feathers of the rump very well developed and expansile into a powder-puff-like erection, especially in the males; rump never spotted as in *Laniarius*. Sexes generally very distinct, and specific differentiation carried to a much greater extent in the female than in the male sex.

Dryoscopus, Boie, Isis, 1826, p. 973. *D. cubla.*

Hapalophus, G. R. Gray, Charlesw. Mag. N. H., 1837, p. 489. *D. cubla*.

This genus contains thirteen distinguishable forms and is confined to Tropical and South Africa. *Dryoscopus atrialatus* (Cassin, Pr. Phil. Acad., 1851, p. 246) appears to be synonymous with *Megabias flammulatus*, and is placed among the *Muscicapidæ*.

a. No white frontal band extending back to over the ear-coverts.

*a*¹. Crown mantle wings and tail black, the wings less glossy.

*a*². No white spots on the lores.

a^s. No white on the scapulars and wings *senegalensis* ♂.

b³. Scapulars mixed with white, but none on the
coverts or secondaries *affinis* ♂.

c³. Wing-coverts and secondaries edged with white or whitish, as well as white on the scapulars.

*a*⁴. Ear-coverts not streaked with white.

a⁵. Rather larger, wing about 3.5; puff-feathers of the rump white tipped with grey; edging of coverts and secondaries dirty white. .

b⁵. Rather smaller, wing about 3·2; puff- feathers pure white; edging of coverts and secondaries pure white } cubla ♂.
hamatus ♂.

c⁵. Smaller still, wing under 3·0; edgings of secondaries very broad and dusky white . . . *pringlii* ♂.

*b*⁴. Ear coverts streaked with white *thamnophilus*.

b². A distinct white spot on the lores, extending to but not beyond the eye.

*d*³. No white on the wings and scapulars *senegalensis* ♀.

- e*³. Scapulars partly white forming a band, but no white on the coverts or secondaries *affinis* ♀.
*f*³. Wing-coverts and secondaries edged with white.
*c*⁴. Puff-feathers of the rump grey washed with buffy-white tips *cubla* ♀.
*d*⁴. Puff-feathers without a buffy wash, plain grey. *hamatus* ♀.
*b*¹. Crown black, contrasting with the ashy brown mantle and wings; no white on the scapulars wings or lores; legs pinkish.
*c*². Crown blacker; under parts more slaty. *angolensis* ♂.
*d*². Crown with a slaty wash over the black; under parts paler *nandensis* ♂.
*c*¹. Crown and mantle not glossy black.
*e*². Feet pinkish; crown and mantle slaty grey. . . { *angolensis* ♀.
*f*². Feet dusky; crown dark slate contrasting with the earthy brown mantle. *nandensis* ♀.
*g*³. Under parts faintly washed with tawny *gambensis* ♀.
*h*³. Under parts with rich tawny *congiacus* ♀.
*g*². Feet dusky, crown dark earthy brown, slightly paler on the mantle.
*i*³. Coverts edged white; under parts faintly washed with tawny. *malzacii* ♀.
*j*³. Coverts edged tawny white; under parts strongly washed tawny *nyanzæ* ♀.
*h*². Feet dusky; crown and mantle pale earthy brown; smaller, wing under 3·0 *pringlii* ♀.
b. A very distinct white frontal band extending back over the eye to above the ear-coverts.
*d*¹. Black of crown and nape, merging into the slate of the mantle.
*i*². Puff-feathers of the rump plain grey *bocagei* ♂ ♀.
*j*². Puff-feathers of the rump white-tipped *jacksoni* ♂ ♀.
*e*¹. Black of the crown and nape above, abruptly demarcated from the slate of the mantle *ansorgei* ♂ ♀.

Dryoscopus senegalensis.

Sigelus senegalensis, Hartl. Orn. W. Afr. p.112 (1857) *Senegambia*.
 Dryoscopus senegalensis, Shelley, B. Afr. i. No. 746 (1896); Reichen.
 Vög. Afr. ii. p. 591 (1903); Sharpe, Ibis, 1908, p. 332 *Cameroon*;
 Bates, Ibis, 1911, p. 539 *Cameroon*; Reichen. Mittl. Zool. Mus.
 Berlin v. p. 82 (1910) *Rio Benito*.

- Dryoscopus verreauxi*, Cab. in Deckens Reis. iii. p. 26 (1869) *Gaboon*;
Shelley, B. Afr. i. No. 739 (1896).
Laniarius (Dryoscopus) tricolor, Cab. and Reichen. J. f. O. 1877, p. 103
Chinchouzo.
Dryoscopus tricolor, Shelley, B. Afr. i. No. 741 (1896); Sharpe, Ibis,
1908, p. 333 *Camaroon*.
Dryoscopus senegalensis var. *camerunenensis* et *griseus*, Reichen.
Vög. Afr. ii. p. 592 (1903) *Camaroon*.
Dryoscopus affinis, Ogilvie-Grant, Ibis, 1908, p. 332 *Ponthierville*; id.
Trans. Zool. Soc. xix. p. 343 (1910) *Congo Forest*.

Adult male. Entire upper half of head, back of neck, mantle, upper side of wings, upper tail-coverts and the tail jet black, no white on the shoulders or wings; lower back and rump forming the puff, and the entire under parts pure white; wing lining with the coverts pure white excepting a black patch next to the primaries, quills dusky-black, with a slight silvery shade on a portion of the inner margins, outer tail-feathers dusky black below with a black shaft. Total length 7·5 inches, culmen 0·7, wing 3·1, tail 2·6, tarsus 0·85. Efulen, ♂, 3. 4. 02 (Bates).

Adult female. Differs in having the mantle, wings and tail dusky, not jet black, with a varying amount of slaty-grey mixed with the dusky of the mantle; the puff-feathers of the rump are dark slaty-grey or pure white throughout or slaty-grey with white bases; there is a white band from the nostrils to the upper part of the eye above the black lores; under-parts slightly greyish; tail-feathers silvery below, with whitish shafts most noticeable on the outer feathers. Wing 3·0, Camaroon (Bates).

Immature. Differs in having the mantle, wings and tail slaty rather than dusky brown; the wing-coverts and quills finely edged with whitish, and the bill paler, especially at the base of the lower mandible. Yambuya (Jameson).

This species ranges over West Africa from Camaroon to Portuguese Congo, and inland through the Congo Forest to the Mombattu country.

The type described by Hartlaub is stated to have come from Senegambia, but appears more probably to have been from Gaboon. This specimen, now in the Leyden Museum, which, through the courtesy of Dr. von Oort, I have been able to examine, is a female and matches very well examples from Camaroon or Gaboon now in the British Museum. The name *D. verreauxi* was given by Cabanis to some Puff-back Shrikes

from Gaboon, identified by Verreaux and Cassin with *D. affinis* from Zanzibar, from which this species only differs in the absence of the white on the shoulders.

One of the most remarkable features of this species, however, is the variability of the female. There is in the British Museum a large series of eight males and twelve females collected by Bates chiefly at Efulen and River Ja in Camaroon. The males are all alike, but the females differ in the colour of the puff feathers of the rump, and also in the amount of ashy on the mantle. Sharpe considered that there were two species among this series, while Neumann also believed that there were two species in which the males were indistinguishable and the females only differed. I am unable to make out that the differences between the females depend on age or season, and am inclined to believe that they must simply be regarded as dimorphic forms of the same bird. This species was obtained by du Chaillu in Gaboon, on the Ogobai and Moonda rivers, and there are examples from Loango (Bouvier), and Gaboon (Verreaux), in the British Museum, which match the Camaroon series quite well. A female obtained at Yambuya on the Aruwimi River by Jameson, formerly identified by me with *D. tricolor*, appears to be a young bird; the base of the bill is somewhat pale and the wing-coverts and quills have pale edgings; in this bird the mantle is dark grey and the puff feathers mingled white and grey. It agrees very well with the description given by Reichenow of his var. *grisescens*. Another bird, also a female, from Mawambi, in the Congo Forest, collected by Woosnam, is identified by Ogilvie-Grant as *D. affinis*, and is certainly difficult to distinguish from the Zanzibar type, as it has distinct traces of white on the shoulders. This is also the case with a male from Ponthierville, on the Upper Congo, obtained by Carruthers, and also identified by Ogilvie-Grant as *D. affinis*; it also has traces

of white on the shoulder. On the other hand, a male from Bellina in the Mombattu country, collected by Emin, is quite indistinguishable from the series from Camaroon.

Sjöstedt met with this bird at Bonga, a village on the Meme River in Camaroon, during the dry season, when he found it fairly common; he states that it keeps chiefly among the tops of the higher isolated trees, whence its ringing note can often be heard. As in other Bush Shrikes, the male's clear flute-like note of two tones is instantly answered by a short, harsh, growling reply from the female.

Mr. Bates, whose collections were made in the more southern portion of the same colony, states that it is called there "Seso," and makes the following remarks: "The varying shades of black, grey and white on the backs of the females of this species has caused much perplexity. Sharpe recognized (doubtfully) two species among my birds, and Neumann thought there were two species found in Camaroon in which the males were alike, only the females differing. My large series of specimens, including those listed above, together with those in the British Museum from former collections, contains many adult males, but all with glossy black backs and wings, and pure white rumps, while the females differ in all degrees, from those with grey backs and wings and light grey rumps, to one almost like the male on the back and rump. It is not unreasonable to suppose the last was an old female, and that as females advance in age they become more like the males in plumage."

In the British Museum this species is represented as follows:—

Camaroon—Efulen, River Ja, Bitye (Bates); *Gaboon*—(Verreaux, Ansell, and Bouvier); *Belgian Congo*—Yambuya (Jameson), Ponthierville (Carruthers), Mawambi in the E. Congo Forest (Woosnam), and Bellina in the Mombattu country (Emin).

Dryoscopus affinis.

Hapalophus affinis, G. R. Gray in Charlesworths, Mag. 1837, p. 489, *Zanzibar*.

Dryoscopus affinis, Gadow, Cat. B. M. viii. p. 141 (1883); Shelley, B. Afr. i. No. 738 (1896); Reichen. Vög. Afr. ii. p. 590 (1903); Erlanger, J. f. O. 1905, p. 699 *Kismayu*.

Malaconotus similis (non Smith), Swains. An. in Menag. p. 342 (1838), *no loc.*

Laniarius orientalis, Gray, Gen. B. i. p. 299 (1845); Finsch and Hartl. Vög. Ost Afr. p. 351, pl. 5, fig. 2 (1870) *Zanzibar* ♀.

Dryoscopus bojeri, Hartl. J. f. O. 1860, p. 103 *Madagascar*.

Dryoscopus leucopsis, Cab. J. f. O. 1868, p. 412 *Zanzibar*.

Laniarius salimæ, Finsch and Hartl. Vög. Ost Afr. p. 349, pl. 5, fig. 3 (1870) *Zanzibar* ♂.

Dryoscopus salimæ, Bannerman, Ibis, 1910, p. 690 *Takaungu*.

Adult male. Above including the whole of the upper part of the head, lores, and region round the eye, also the mantle, wings, upper tail-coverts and tail black, more glossy on the head and nape; silky feathers of the rump white; shoulders with a certain amount of white, sometimes only a few nearly concealed white feathers, sometimes with a well defined line of white plainly showing, but no white on the wing-coverts, and only in exceptional cases traces of white on the edge of the wing. Below including the inner lining of the quills and the under wing-coverts and axillaries white, except the patch of under primary coverts which is dark brown; under side of the outer tail-feathers silvery with a whitish shaft. "Iris red, bill black, feet blue-grey." Fischer. Length 6·5 inches, wing 3·25, tail 2·5, culmen 0·7, tarsus 0·9. *Zanzibar*, type (Laugier).

Adult female. Differs from the male in having a white spot running from the nostrils to above the middle of the eye; the rump puff-feathers are pearly-grey, not white, and the amount of white on the shoulders varies as in the males. Wing 3·0. Manda Island ♀ (Jackson).

The *Zanzibar Puff-back Shrike* is found only along the coast-lands of East Africa from the Juba River valley south to Dar-es-Salaam.

The history of the bird is a good deal involved owing to its variation and to the fact that the type of the species, partly owing to its having been at one time mounted, does not readily show without careful inspection the characteristic white of the shoulders. This character, moreover, is certainly

less noticeable in the birds from Zanzibar Island, Pangani and Dar-es-Salaam than in those from the coast of British East Africa further north.

The type of the species described by Gray came from Zanzibar and was originally in the Laugier collection; of the other synonyms *Malaconotus similis*, the name of which was afterwards changed by Gray to *orientalis*, had no type locality but was fixed on a female of the present species from Zanzibar by Finsch and Hartlaub, while *Laniarius salimæ* was formed on the male from the same locality. Sharpe (P. Z. S., 1878, p. 357) first united the male to the female in a note to a paper by Nicholson, who described a collection from Dar-es-Salaam containing examples of this species collected by E. C. Buxton. Fischer has obtained this species at various localities from Zanzibar to Witu, and states that it haunts thick-leaved trees and has a beautiful flute-like note, which, though seldom heard, is highly characteristic. Jackson found this species very common on Manda Island close to Lamu, and states that it has a curious habit of snapping its wings together when taking a short flight. Beyond this there are no field-observations of this species. It has been obtained by Baron von Erlanger at various localities in South Somaliland on the Juba River up to Dogge about 150 miles from its mouth.

The British Museum contains examples from the following localities. *British E. Africa*—Lamu and Manda Island (Kirk and Jackson), Malindi (Kirk), Takaungu (Percival), Mombasa (Fischer); *German E. Africa*—Pangani (Kirk), Dar-es-Salaam (Buxton); *Zanzibar Island*—(Hildebrandt, Kirk and Laugier).

Dryoscopus gambensis.

Lanius gambensis, Licht. Verz. Doubl. p. 48 (1823) *Senegambia*.

Dryoscopus gambensis, Gadow, Cat. B. M. viii. p. 146 (1883); Shelley, B. Afr. i. No. 747 (1896); Reichen. Vög. Afr. ii. p. 595 (1903); id. Mittl. Zool. Mus. Berlin v. p. 222 (1911) *Camaroon*.

Maloconotus mollissimus, Swains. B. W. Afr. i. p. 240, pl. 23 ♂ (1837) *Senegal*.

Dryoscopus cucullatus, Hartl. Orn. W. Afr. p. 111 (1857) *Senegal*.

Subspecies a. Dryoscopus congicus.

Dryoscopus congicus, Sharpe, Ibis, 1901, p. 39 *Condé*.

Adult male. Upper half of the head and neck, tail-coverts and tail glossy black; wings dusky brown with the edges of all the feathers white with a brownish wash; scapulars greyish-white mingled with dusky; puff feathers of the rump white at the base, washed with grey about the tips; below including the cheeks and under tail-coverts white, usually washed with grey; under wing-coverts and inner lining of the quills white. "Iris chrome-orange to blood-red, bill greenish-black, feet pale olive-green." (Ansorge.) Length 8.25 inches, wing 3.7, tail 3.6, culmen 0.85, tarsus 0.90. Krachi, ♂, 23. 5. 01 (Alexander).

Adult female. Head and nape dark ashy-brown, sometimes a slaty-brown, obscurely streaked with dusky, back and wings brown without slaty, the tail a duskier brown shade; the wing quills and coverts edged with pale tawny; the puff feathers of the rump ashy-grey washed with brown at the tips; under parts white, washed with ochraceous tawny paling to pure white on the under tail-coverts; under wing-coverts and inner lining of the quills pale tawny; no well-defined spot or line of white on the lores, though the loreal area is generally paler than the surrounding parts. "Iris chrome-orange, bill greenish-black, slate-blue on the lower mandible, feet pale olive-green. Wing 3.4. Gunned, ♀, 23. 7. 09 (Ansorge).

Immature. A young male closely resembles the female.

Subspecies D. g. congicus. The male cannot be distinguished from that of the typical race; wing 3.6. Landana, ♂, 20. 5. 77 (Lucan). The female is darker and more richly coloured than that of the typical form. The edges of the coverts and quills are a rich tawny, while the underparts are also the same colour, paling, though not to white, on the under tail-coverts. Bill pale horny in the dried skin. Wing 3.4, Condé, ♀ (Lucan).

The Gambian Puff-back Shrike ranges over West Africa from Senegambia south to the Congo and inland throughout northern Nigeria. The type is stated by the describer to have been obtained from Senegambia, while those of the two

synonyms of Swainson and Hartlaub were received from Senegal. In the southern part of its range the females differ from those of the west coast proper in their much richer coloration and form a distinct subspecies, as has been shown by Sharpe.

In the Gambia Colony this Puff-back has been collected by Randall and Budgett, in Sierra Leone by Fraser and Afzelius, in Liberia by Büttikofer and on the Gold Coast by various collectors, such as Ussher, Blissett and Riis, while in the interior of that colony it has been obtained by Colonel Northcutt and Alexander; the latter also collected this species in several localities in northern Nigeria. Reichenow notes it from Camaroon, where it has been met with by other German collectors, though it does not appear in the list of Mr. Bates's birds. Further south Falkenstein, and Lucan and Petit have taken the more brightly coloured race in the Portuguese colony of Cabinda north of the Congo, and Bohndorff at Manyanga and Leopoldville on the Congo.

Hartert, who obtained examples at Loko on the Benué River, found caterpillars and dung beetles in the stomach and observed it pursuing small birds with evil intent, while Alexander (Ibis, 1902, p. 312) writes: "Breeds in April. The call of this species is loud and flute-like. We observed it frequenting acacia-trees and picking off the young shoots with avidity. It is common, but found only outside the forest-region."

The following is a list of the localities whence there are examples in the British Museum:—

Gambia (Whiteley, Layard, and Moloney); *Portuguese Guinea*—Gunnal (Ansorge); *Sierra Leone* (Fraser); *Liberia*—Grand Cape Mount (Büttikofer); *Gold Coast Colony*—Ashantee (Gould), Fantee (Higgins), Elmina (Blissett), Volta River (Ussher), Sekwi, Gambaga and Krachi (Alexan-

der); *S. Nigeria*—Abeokuta (Robin); *N. Nigeria*—Lokoja (Forbes), Pittu and Katab (Alexander).

D. g. congieus: Condé, Landana and St. Antoine, all in *Portuguese Congo* (Lucan and Petit).

Dryoscopus malzacii.

Malaconotus malzacii, Heugl. S. B. Akad. Wien, xix. p. 286 (1856)
White Nile, nom. nud.; id. Orn. N. O. Afr. p. 457 (1871).

Dryoscopus malzacii, Ogilvie-Grant, Ibis, 1904, p. 265 *S. Abyssinia*; 1907, p. 588 *Baro River*; Erlanger, J. f. O. 1905, p. 699; Reichen. Vög. Afr. iii. p. 834 (1905); Butler, Ibis, 1900, p. 226, 1909, p. 81 *Bahr el Ghazal*.

Dryoscopus cinerascens, Hartl. J. f. O. 1880, p. 212 *Lado*; Shelley, B. Afr. i. No. 745 (1896).

Dryoscopus malzacii erythreæ, Neumann, J. f. O. 1899, p. 412 *Salamaona, Eritrea*; 1905, p. 223 *Shoa*; Zedlitz, J. f. O. 1910, p. 800 *Eritrea*.

Subspecies a. Dryoscopus nyansæ.

Dryoscopus malzacii nyansæ, Neumann, J. f. O. 1899, p. 412 *Kavirondo*.

Dryoscopus malzacii, Ogilvie-Grant, Trans. Zool. Soc. xix. p. 342 (1910)
Ruwenzori.

Dryoscopus cinerascens, Jackson, Ibis, 1906, p. 552 *Toro*.

Adult male. Very closely resembling *D. gambensis*, from which it cannot be distinguished except by its slightly smaller bill, averaging from the nostril to the tip of the culmen 0·5 inches, against 0·6 in the West African species. Iris orange, bill black, feet slate blue. Length 7·5 inches, wing 3·5, tail 3·2, culmen 0·8, tarsus 0·9. Ruwenzori, ♂, 22. 1. 06 (Legge). A specimen from Abyssinia (Hoorsa, 19. 1. 02, Degen) has the same measurements.

Adult female. Above dusky, almost black on the crown, slightly browner on the back and wings; tail black; puff-feathers on the rump dark grey, washed with dirty brown; scapulars, coverts, and secondaries edged with whitish, the edging on the primaries slightly tawny; under parts white, the chest and flanks washed with ochraceous, generally rather faintly, but the throat and under tail-coverts always pure white. Wing 3·4. Habub (Esler).

D. nyansæ. Females from Uganda and East Africa are much more strongly coloured on the under parts with tawny ochraceous, and this spreads over the throat and under tail-coverts. The scapulars, coverts, and quills are edged and tipped with tawny, not white. Wing 3·3. Ruwenzori, ♀, 14. 3. 06 (Woosnam).

Heuglin's Puff-back Shrike is found throughout north-east and most of central Africa, from Eritrea and the White Nile to the Shari region east of Lake Chad, and south to Ruwenzori and Kavirondo in British East Africa. In the case of the females only it is possible to distinguish two subspecies:—

D. malzacii from the Nile Valley and Abyssinia, with paler under parts and white throats and under tail-coverts.

D. m. nyansæ from Uganda and the Shari River region, with the under parts and edges of the wing tawny and more richly coloured.

This Shrike was first met with by Salt in Abyssinia, and was mentioned by him in his travels, but neither he nor Rüppell nor Blanford recognized its distinctions from the South or West African species of the same genus.

Heuglin's description was founded on a female from the country of the "Bohr" or "Schir" negroes of the Upper White Nile (*i.e.*, between the Sudd country and Gondokoro); subsequently Hartlaub described what appears to be the same bird from an example obtained by Emin at Lado, not far off. Neumann, in his revision of the Bush Shrikes, recognized three subspecies of *D. malzacii*: the typical subspecies from the Nile Valley, to which he assigned Hartlaub's *D. cinerascens* with pale yellow under parts; *D. m. nyansæ* with the darker and more richly coloured under parts; and *D. m. erythreæ* with hardly any yellowish on the under parts, which are described as dirty white.

An examination of the large series in the British Museum shows that there is a good deal of variation among the Abyssinian birds, and that some of them are almost as richly coloured as those from Uganda, and it seems best to make only two races.

In southern Abyssinia and Gallaland this species was met

with by the English collectors, Lord Lovat, Pease and Degen, by Antinori, who collected for the Genoa Museum, and by Neumann and Erlanger among the Germans. From East Africa and Uganda Jackson has obtained a large series, some of which are in the British Museum, while the Ruwenzori Expedition obtained a good number of specimens on the slopes of that mountain up to an elevation of 6,500 feet. During his journey from Lake Chad to Khartum, Alexander collected examples in the Shari River region which match those from Ruwenzori very well.

But few travellers have written any notes of the habits of this species. Heuglin is almost the only author who has done so. He found it a resident in the lowlands of Abyssinia, in Senaar, Kordofan, and on the upper White Nile; it does not reach higher elevations than about 6,000 feet, and is specially fond of isolated thick-leaved trees, in the shelter of which it lives in pairs or small families, and which it seldom leaves. It flits from one branch to another, and searches the buds and leaves for insects. Its voice, according to Brehm, resembles that of the Nuthatch, but Heuglin thought it more flute-like in sound.

In southern Abyssinia Neumann found this bird in low bush at the edge of forests, chiefly in the river valleys, but occasionally as high as 8,500 feet. Woosnam met with it on the slopes of Mt. Ruwenzori, always in acacia bush, up to about 6,500 feet, and states that the note is a curious one and unlike that of any other Bush-Shrike.

The following list of examples examined in the British Museum shows the distribution of the two subspecies:—

D. malzacii: *Eritrea*—Achor and Habub (Esler), Anseba Valley (Blanford), Waliko, Bejook and Maraguay (Jesse); *Abyssinia*—Lakes Tsana, Zegi and Zwai, Miesse, Hoorsa (Degen), Mendi, Addara, Hado and Arriro (Lovat), Moubou,

Tadejemulka, Katyiwaha (Pease); *Somaliland*—Mt. Darro (Gillett); *Sudan*—Baro River (Zaphiro), Dem Suleiman in Bahr el Ghazal (Bohndorf).

D. nyansæ: *British East Africa*—Guaso Nyiro (Delamere), Ravine (Jackson); *Belgian Congo*—Ruwenzori (Ruwenzori Expedition), Mombattu country (Alexander); *French Congo*—Shari River near Lake Chad (Alexander).

In Mr. Jackson's collection there is a large series from Entebbe, Katwe, Busoga, Eldoma, Nandi and Lumbwe, all localities in Uganda or its confines, and all referable to *D. m. nyansæ*.

Dryoscopus cubla.

Lanius cubla, Shaw, Gen. Zool. vii. p. 328 (1809) *Knysna ex Levaill.*

Dryoscopus cubla, Gadow, Cat. B. M. viii. p. 148 (1883); Shelley, B. Afr. i. No. 742 (1896); Stark and Selater, Faun. S. Afr. B. ii. p. 26, pl. *nesting* (1901); Reichen. Vög. Afr. ii. p. 592 (1903); Shortridge, Ibis, 1904, p. 182 *Pondoland*; L. E. Taylor, J. S. Afr. Orn. Union 1906, p. 66 *Irene*; C. H. Taylor, *ibid.* 1907, p. 19 *Amsterdam*; Haagner and Ivy, *ibid.* p. 89 *Albany*; Swynnerton, Ibis, 1907, p. 47, 1908, p. 51 *Gazaland*; W. Selater, Ibis, 1911, p. 286.

Thamnophilus leucopygus, Lawr. Ann. Lyc. N.Y. viii. p. 401 (1867)

"*New Granada*" (error); Salvin, Ibis, 1874, p. 316.

Dryoscopus cubla occidentalis, Neum. J. f. O. 1899, p. 413 *Angola*.

Le Cubla, Levaill. Ois. d'Afr. ii. p. 89, pl. 72 (1799).

Subspecies a. Dryoscopus hamatus.

Dryoscopus hamatus, Hartl. P. Z. S. 1863, p. 106 *Unyamwesi*; Gadow, Cat. B. M. viii. p. 142 (1883); Neave, Manch. Mem. li. No. 10, p. 73 (1907) *N.E. Rhodesia*; Ogilvie-Grant, Ibis, 1908, p. 291 *N.W. Lake Tanganyika*.

Dryoscopus cubla hamatus, Reichen. Vög. Afr. ii. p. 594 (1903); Stoehr and Sel. J. S. Afr. Orn. Union, 1906, p. 95 *N.E. Rhodesia*; Neave, Ibis, 1910, p. 227 *Katanga*; Reichen. Deutsch Zentr. Afr. Exped. iii. p. 313 (1910); Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 115 (1910).

Dryoscopus cubla suahelicus, Neum. J. f. O. 1899, p. 414; Bannerman, Ibis, 1910, p. 690 *Kilimanjaro*.

Adult male. Upper half of head, hinder half of neck, upper back, upper tail-coverts and the tail, black with a bluish gloss; tail with a very narrow

white margin, sometimes widening out at the ends of a few of the feathers; lower back and puff feathers pure white or with a faint wash of dusky grey on the ends of some of the feathers; scapulars black with the greater portion of the outer webs of the feathers white; wings black, with a variable amount of white edges on the feathers, broadest on the median and greater-coverts and the secondaries, and often absent on the other feathers; under wing-coverts, edge of wing at the pinion, inner edges of quills and the entire under parts pure white, sometimes tinted with grey, especially on the flanks. Iris red; bill black; feet grey. Total length 7 inches, culmen 0.7, wing 3.2, tail 2.8, tarsus 0.95. Durban, ♂, 28. 3. 74 (Shelley).

Adult female. Differs in having more white on the sides of the head, the front and sides of the forehead and the sides of the head up to the level of the middle of the eye being white; lower back and sides of the upper back grey washed with brownish buff; lower throat and the breast also tinted with buff; a portion of the keel of the lower mandible pale; iris yellow to red. Wing 3.05. Durban, ♀ (Gordge).

Immature. Similar to the last, from which it differs in having the pale portions of the scapulars, wings and under parts washed with buff; lower back slightly browner; bill with the lower mandible and a portion of the upper one pale. Wing 3.1. Durban, ♂, juv., 24. 3. 74 (Shelley).

Subspecies D. c. hamatus. The male cannot be distinguished from that of the typical race; the female, however, has no trace of brownish buff wash on the puff-feathers of the rump, this part being a pearly-grey. Varying in size, but on the whole not differing from the typical form. Wing 3.3, Beira, ♂ (Grant). Wing 3.2 and 3.3, Nairobi, ♂ (Delamere).

The Cubla Puff-back Shrike ranges over the greater part of south and east Africa from the Knysna to northern Angola, Nyasaland and British East Africa.

The males throughout this wide extent of country cannot be distinguished from one another, and though there is a little variation in dimensions it seems to be more or less dependent on local conditions, and examples from Knysna in Cape Colony and Melinda in British East Africa and Malanje in Angola are alike in this respect. Among the females, however, there is a certain amount of variation. Those from Cape Colony and Natal have always a distinct olive-brown wash over the pearly-grey puff-feathers; this is absent from birds collected in Rhodesia and further north, and is the character used by Reichenow to distinguish his East African subspecies *D. c.*

hamatus which must, under these circumstances, range as far south as the Limpopo.

We may therefore distinguish two subspecies: *Dryoscopus cubla cubla* ranging from Knysna to Zululand and north to the Limpopo, type locality Knysna. *Dryoscopus cubla hamatus* from the Limpopo north to northern Angola and British East Africa, type locality Kazeh in Unyamwesi, German East Africa, where it was procured by Speke. The species was first discovered and named by Levaillant in the forests of the Knysna, and it was on his description that Shaw's name was founded.

In Benguella the Cubla was found by Anchieta in nearly every district south of the Quanza River, and he gives a variety of native names by which it is known in different localities. In Damaraland it is rare; Andersson writes: "I have found this Shrike very sparingly in Damaraland, where I met with it first at Okamebute and then northward as far as the Okavango; but I nowhere found it common. The few I saw were either singly or in pairs, perching on the larger trees and hunting on the branches with great assiduity for larvæ and insects, especially beetles and ants. The note is harsh and loud. It is sometimes in the habit of elevating the lax feathers on the lower back, which, when properly expanded, almost encircle the bird; this appears to occur under the influence of amorous emotions and also when the bird is aroused by fear or curiosity." Birds in this attitude are well represented in the figures given by Stark and Sclater.

In Cape Colony the Cubla is common from Knysna eastwards in the more wooded districts to Natal, where it is known to the English as the "Snowball Shrike" and to the Zulus as the "Umhlopekasi," and where it has been collected by Mr. Ayres and many others.

Mr. Ayres also found the species in the bush-covered mountains of Rustenburg in the Transvaal.

From Gazaland Swynnerton writes at considerable length on the habits of this species. He states that it is found in thick bush or open wood, but not in thick forests. In the summer it is usually in pairs, in the winter in small flocks, which sometimes attach themselves to the Drongo regiment. It is a most diligent insect-hunter and examines most minutely the foliage of the larger trees in its search. The commonest note is a loud click followed by a clear whistle, but in the spring it acquires a somewhat extended range of song, the male with outstretched neck and head on one side singing "Trr-trr-trr-trr-trr Trrk-who-wheoo!"

North of the Zambesi the Cubla is common throughout Nyasaland and has been collected by Whyte; it has been obtained by various German travellers in German East Africa; Böhm found it abundant in wooded districts during his journey from Zanzibar to the western shores of Tanganyika, and Sjöstedt found it common on the steppes and also on the slopes of Kilimanjaro up to about 5,500 feet.

The Woodward brothers found a nest of this species in Natal. It was built in a low tree and was cup-shaped and neatly made of grass bound outside with cobweb; the eggs, three in number, are white, speckled with dark brown forming a ring at the larger end. Messrs. Haagner and Ivy give a somewhat similar account of a nest found near Grahams-town; they write: "Fairly common in the wooded kloofs. The nest is a neat cup-shaped structure of roots and fibres, the outside being usually composed of strips of the palm-like leaves of a *Dracæna*, thickly matted with cobwebs, and always built round the fork or branch on which it is placed. The eggs are usually three in number and of a pinkish white ground colour, thickly spotted at the obtuse ends with small dots of deep pinkish brown."

The British Museum contains examples of this species from the following localities:—

Dryoscopus cubla: Cape Colony—Knysna (Andersson and C. Grant), Port Elizabeth (Cutler), Elands Post (Atmore); Natal—Durban (Shelley), Illovo (C. Grant), Drakensberg (Butler); Transvaal—Rustenburg (Lucas), Crocodile River, (Oates), Barberton (Pease), Swaziland (Buckley), Klein Letaba, Woodbush and Legogot (C. Grant).

Dryoscopus cubla hamatus: Angola—Humbe (Anchieta); German South-West Africa—Elephant Vlei (Andersson); S. Rhodesia—Umvuli and Hunyani rivers (Jameson), Bula-wayo (Selous), Chiquaqua (Sowerby), Salisbury (Marshall); N.-E. Rhodesia—Loangwa River (Neave); Portuguese E. Africa—Zumbo (Alexander), Tete (Livingstone), Beira (C. Grant), Cheringoma (Cavendish), Rovuma River (Thomson); Nyasaland—Zomba, Milanji and Nyika plateau (Whyte), Angoniland (Sharpe); German E. Africa—Dar-es-Salaam (Moir), Pangani and Usambara (Kirk), Kilimanjaro (Johnston and Percival); British East Africa—Malinde and Lamu (Kirk), Takaungu (Percival), Nairobi and Msara (Delamere).

Dryoscopus pringlii.

Dryoscopus pringlii, Jackson, Bull. B. O. C. iii. p. 3 (1893) *between Tsavo and Kufumika*; id. Ibis, 1901, p. 38; Shelley, B. Afr. i. No. 744 (1896); Reichen. Vög. Afr. ii. p. 597 (1903); Erlanger, J. f. O. 1905, p. 699 *South Somaliland*.

Adult male. Similar to *D. cubla*, but very much smaller, and having the pale edges to the scapulars, coverts and secondaries broader and more conspicuous and washed with pale brown; the edges of the feathers of the lower mantle are also pale brown. The puff-feathers are pure white at the base, the tips pale grey and frequently stained. Below white washed with pale brownish grey across the breast and along the flanks. Iris crimson, bill black, pale horny at the base of the lower mandible; feet horn blue. Length 5.75 inches, wing 2.75, tail 2.35, culmen 0.60, tarsus 0.70. Tsavo-Kufumika road, ♂, type, 5. 4. 92 (Jackson).

Female. Is very different looking; it has the whole of the upper parts light mouse brown with white edgings to the coverts and inner secondaries; the lores and a ring round the eye are whitish and the ear-coverts like the upper

parts; below white with a wash of pale ochraceous on the chest and flanks. The puff-feathers of the rump are pearl grey washed with the same brown as that of the back at the tips. Webbe Shebeyli, ♀, 5. 9. 94. (Gillett).

Immature. Closely resembles the female.

Pringle's Puff-back Shrike inhabits the dry, thorny wildernesses of East Africa, ranging from the country east of Kilimanjaro to south Somaliland. It was discovered and named by Mr. F. J. Jackson, who obtained two examples: a young male in the Mauungu wilderness and an adult between the rivers Tsavo and Kufumika, both localities in the desert country between Kilimanjaro and the sea. He subsequently obtained a pair and a young male at Nyaso Nyiro to the north of Kenia. Erlanger collected a good series at Kismayu and in the Garre Lewin country, in the valley of the Juba River, and there is a female from the Webbe Shebeyli in western Somaliland obtained by F. Gillett on September 5, 1894, in the British Museum.

Dryoscopus thamnophilus.

Dryoscopus thamnophilus, Cabanis, J. f. O. 1868, p. 412; id. in Decken's Reis. iii. p. 26, pl. 8 (1869) *Kilimanjaro*; Gadow, Cat. B. M. viii. p. 147 (1883); Shelley, B. Afr. i. No. 743; Reichenow, Vög. Afr. ii. p. 598 (1903).

Adult. Above grey, the top of the head black, the forehead, sides of the neck, chin, and throat grey, the chin paler, the shafts of the ear-coverts whitish; mantle and shoulders mixed black and white, the shoulder stripe white; lesser wing-coverts black, the greater and the quills black, edged with white; upper tail-coverts and tail-feathers black, the last with a white terminal edging; middle of the lower parts, under tail- and under wing-coverts white, sides of the body grey. Bill dark horn, feet horn grey. Length 6·7 inches, wing 3·2, tail 2·9, bill 0·7, tarsus 0·9 (after Reichenow).

This bird is only known from the type obtained by Baron von der Decken somewhere in East Africa, presumably near Kilimanjaro. It differs considerably according to Reichenow from other members of the genus, and shows some affinities

to *Thamnophilus*. This is shown in the small weak feet, the wing, in which the fourth, fifth and sixth primaries are the longest, and the fine white streaks on the ear-coverts.

***Dryoscopus angolensis*.**

Dryoscopus angolensis, Hartlaub, P. Z. S. 1860, p. 111 *Bembe*; Gadow, Cat. B. M. viii. p. 134 (1883); Shelley, B. Afr. i. No. 740 (1896); Reichen. Vög. Afr. ii. p. 590 (1903).

Adult male. The whole of the upper half of the head and nape black with a slight bluish gloss marked off very abruptly from the mantle, which with the wings, tail-coverts and tail is dark slaty grey; rump and lower back pearly grey with whitish bases to the feathers, which often shows as a patch in the middle of the back; below white washed with grey most strongly on the flanks, which are almost slaty; edge of the wing, under wing-coverts and inner margins of the quills white. Iris dark brown, eyeball azure blue, bill black, feet pinkish to purplish. Total length 7.25 inches, wing 3.15, tail 2.70, culmen 0.80, tarsus 0.90. N'Dalla Tando, ♂, 5. 8. 08 (Ansorge).

Adult female. Has the head dark slaty grey like the rest of the upper parts, with a narrow white stripe above and below the eye; the rump feathers are rather paler and of a more pearly shade but have no white bases; below, including the cheeks and throat, bright tawny becoming pale grey on the lower flanks and thighs and almost white on the under tail-coverts; under wing-coverts and lining of the quills also tawny. Iris dark brown with a blue eyeball, upper mandible greenish black, lower pinkish grey and at the base, shading into Cambridge blue at the tip, feet purplish pink. Wing 3.2, tail 2.9. N'Dalla Tando, ♀, 17. 11. 08 (Ansorge).

Immature. Another bird marked ♀, also collected by Ansorge, which seems to be not quite adult, has a slight wash of olive-brown over the mantle and outside of the quills, and the tawny of the lower parts is more developed, and extends further back over the thighs.

The Angola Puff-back Shrike appears to be confined to northern Angola. It was first obtained at Bembe about 130 miles inland from Ambriz, where it was found by Monteiro to be common in thick woods. He further states that the stomach was very large and filled with Indian corn and seeds, and that it was known as "Entuecula" by the natives.

In addition to the type, a single example obtained by

Monteiro, the British Museum contains a series of seven males and five females, recently collected by Dr. Ansorge at N'Dalla Tando in north Angola, between the months of August, 1908, and January, 1909.

Dryoscopus nandensis.

- Dryoscopus nandensis*, Sharpe, Bull. B. O. C. xi. p. 28 (1900) *Nandi*;
 Jackson, Ibis, 1901, p. 41, pl. 2, fig. 1; 1906, p. 552 *Toro*;
 Ogilvie-Grant, Trans. Zool. Soc. xix. p. 342 (1910) *Ituri Forest*.
Dryoscopus angolensis nandensis, Reichen. Vög. Afr. ii. p. 590 (1903); id.
 Deutsch. Zentral. Afr. Exped. iii. p. 313 (1910).
Dryoscopus adolfi-friederici, Reichen. Orn. Monatsb. 1908, p. 160
Roussoro.

Adult male. Closely allied to *D. angolensis*, from which it differs merely in the slaty shade over the black crown, and rather paler under parts; it is slightly larger in size, and the bill is a trifle shorter. Iris dark brown, bill black, feet dull flesh. Length 7.0 inches, wing 3.4, tail 2.75, culmen 0.70, tarsus 0.85. Ituri forest, ♂, 16. 10. (Woosnam).

The Nandi Puff-back Shrike is confined to central Africa, ranging from the Congo Forest west of Lake Albert and Lake Albert Edward to Nandi, east of Lake Victoria.

The type was discovered by F. J. Jackson in the Nandi country at about 6,500 feet; it shows signs of immaturity in the buff margin to some of the coverts and secondaries, and the pale edges to the mandibles. A second example was obtained by Archer for Jackson at Kibera in Toro some years subsequently, while the Ruwenzori Expedition procured only a single example at Irumu in the Ituri Forest. This was shot by Woosnam among the tree tops of the forest. Ansorge also got a specimen in the Congo Forest at Diapanda "six days west of Beni in the Semliki Valley." On an example obtained by the Duke of Mecklenburg "west of Ruwenzori at 1,800 metres," Reichenow based his *D. adolfi-friederici*, which he afterwards found to be identical with the present

form. It is hardly more than subspecifically distinct from *D. angolensis*.

Dryoscopus bocagei.

Laniarius bocagei, Reichen. Orn. Monatsb. 1894, p. 125 *Jaunde*; id.

J. f. O. 1896, p. 26, pl. 2.

Dryoscopus bocagei, Sharpe, Handl. B. iv. p. 296 (1903); id. *Ibis*, 1908, p. 331 *Cameroon*; Bates, *Ibis*, 1909, p. 35 *Cameroon*.

Chlorophoneus bocagei, Reichen. Vög. Afr. ii. p. 557 (1903); id. Mitt. Zool. Mus. Berl. v. p. 82 (1910) *Rio Benito*.

Subspecies a.—Dryoscopus jacksoni.

Dryoscopus jacksoni, Sharpe, Bull. B. O. C. xi. p. 57 (1901) *Mount Elgon*.

Laniarius jacksoni, Reichen. Vög. Afr. ii. p. 576 (1903).

Chlorophoneus bocagei jacksoni, Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 311 (1910).

Subspecies b.—Dryoscopus ansorgei.

Dryoscopus bocagei ansorgei, W. Selater, Bull. B.O.C. xxix. p. 37 (1911).

Adult male. Crown and nape, sides of the head and neck black, gradually merging in the dark, slate-coloured back; the wing-coverts, inner secondaries and upper tail-coverts also slaty, the wing quills dusky, and the tail black; puff-feathers of the rump the same colour as the back, sometimes tipped paler but with no white; a frontal band, lores, a supraocular stripe extending to above the ear-coverts, and under parts white, the breast washed with a rather dark shade of ochraceous, the flanks with slaty grey; tail-feathers with traces of a white tip; under wing-coverts white with a black patch on the outer primaries, inner lining of the quills whitish. "Iris dark yellow, bill black, feet blue grey" (Reichenow). Length 7·75 inches, wing 3·1, tail 2·8, culmen 0·55, tarsus 1·0. River Ja, ♂, 12. 2. 06 (Bates).

Adult female. Resembles the male. Wing 3·05 (Bates).

Subspecies D. jacksoni. Closely resembling *D. bocagei*, but the ochraceous wash of the breast of a paler shade, the flanks a much purer white and puff-feathers of the rump distinctly tipped with white. Length 7·0 inches, wing 3·15, tail 2·6, culmen 0·5, tarsus 0·8. Nandi ♂ type (Jackson).

Subspecies D. ansorgei. Closely resembling *D. bocagei*, but distinguished by the black of the crown and nape, which is quite abruptly demarcated from the slate of the mantle and back; the slate of the back also is slightly darker, and has an olivaceous tinge quite absent from the Cameroon bird; the puff-feathers of the rump are the same colour as the back, and have paler tips, but no distinct white is in *D. b. jacksoni*; the wash on the breast

varies somewhat in intensity, but is cinnamon rather than ochraceous. Iris dark-brown, bill black, feet slate-blue. Length 6·5 inches, wing 3·1, tail 2·85, culmen 0·50, tarsus 0·90. N'Dalla Tando, type, ♂, 5. 8. 08 (Ansorge).

Bocage's Puff-back Shrike is confined to Camaroon and Spanish Guinea, and is replaced by the two closely allied subspecies, Jackson's in Uganda, and Ansorge's in North Angola.

The type of Bocage's Puff-back was collected by Zenker at Jaunde in German Camaroon, and it has since been obtained by Bates on the River Ja in the southern part of the same colony. This observer states that it is known as the "Asanze," and makes the following remarks: "All were in the small trees bordering cultivated ground. One of them was heard making a call much like that of *D. senegalensis*. The female was shot just after leaving the nest, in a little tree on the border of a patch of maize. The nest was shallow, cup-shaped, and composed entirely of the dry tendrils of a vine woven together."

Reichenow has recently recorded this species from Bebai on the Rio Benito in Spanish Guinea.

The type of *D. jacksoni* is stated in the original description to have been obtained at Mount Elgon, but the type is labelled Nandi, which is some distance further south. In the Jackson collection there are additional examples from Kazi and the Mabira Forest, both in the Uganda Protectorate, and it was also obtained, according to Reichenow, by Grauer at Entebbe.

The third form of this species, *D. b. ansorgei*, is only known from N'Dalla Tando in north Angola, where Dr. Ansorge collected, in addition to the type, a series of five males and five females between the dates August 2 and December 23, 1908.

Genus III. CHAUNONOTUS.

Type.

Chaunonotus, G. R. Gray, Charlesw. Mag. N. H. i.

p. 487 (1837) *C. sabini*.

Resembling *Dryoscopus* in the general form and plumage, differing only in the bill, which is very large, broad, and flat, and without a ridged culmen.

Only one species, forming two subspecies.

Chaunonotus sabini.

Thamnophilus sabini, J. E. Gray, Zool. Misc. i. p. 7 (1831).

Chaunonotus sabinei, G. R. Gray, Charlesw. Mag. N. H. i. p. 487 (1837)

Sierra Leone; Jard. Ill. Orn. (2), pl. 27 (1838); Reichen. Vög.Afr. ii. p. 598 (1903); Kemp, Ibis, 1905, p. 234 *Bo*.

Dryoscopus sabinei, Gadow, Cat. B. M. viii. p. 143 (1883); Shelley,

B. Afr. i. No. 748 (1896).

Subspecies a.—*Chaunonotus melanoleucus*.Hapalophus melanoleucus, Verr. Rev. Mag. Zool. 1851, p. 312 *Gaboon*.Chaunonotus melanoleucus, Sharpe, Ibis, 1908, p. 333 *Camaroon*.

Adult male. Upper half of the head, including the ear-coverts, back of the neck, mantle, and upper tail-coverts glossy blue black; wings and tail black, with less blue; remainder of the back pure white, cheeks and under parts, under wing-coverts and inner edges of the quills white, rest of the quills dusky underneath; a patch of black on the back of the thighs. "Iris, dark red; feet lead-coloured" (Sjöstedt). Length 7.75 inches, wing 3.4, tail 2.8, culmen 0.90, tarsus 0.90. Fantee (Ussher).

Adult female. Upper half of the head and back of the neck slaty grey, shading off into ochraceous brown on the remainder of the upper parts; quills dusky brown, edged with ochraceous; an indistinct whitish eyebrow, and some white beneath the eye and a dusky spot in front; under parts, including the cheeks, thighs, under wing-coverts and inner edges of the quills bright ochraceous. "Iris reddish-brown; bill and legs slaty blue." Kemp. Wing 3.0, culmen 0.90. Denker, 2.72 (Ussher).

Immature male. Closely resembling the female with pale bill and legs. An example obtained at Prahsu in the Gold Coast Colony by Alexander, is assuming the male plumage; the crown and nape is mottled with black feathers, and some fresh tail-feathers are growing out with black bases and yellow tips.

Subspecies C. s. melanoleucus. The male only differs from that of the

typical subspecies in its somewhat larger size, and especially in the broader bill averaging 0.30 to 0.35 across at the nostrils, against 0.25. Wing 3.45, tail 2.9, culmen 1.05. River Ja, 2. 2. 06 (Bates). The female has the mantle slightly darker than that of the female of the typical subspecies, and the tail dark ochraceous brown instead of brown with a rufous tinge. Wing 3.2. Efulen, 17. 7. 05 (Bates).

This species ranges from Sierra Leone to the Congo, and can be separated into two races:—

D. sabini from Sierra Leone to the Gold Coast Colony.

D. s. melanoleucus from Camaroon and Gaboon.

The type of the species, an adult male, was procured by Captain Sabine at Sierra Leone many years ago, and is still in the British Museum. In the same colony it has been met with by Robin Kemp.

In Liberia the species has been recorded from several localities by Büttikofer, and from the Gold Coast Colony by Ussher, Pel, Riis, and Alexander. Ussher states that it keeps chiefly to thick forest.

The type of the southern subspecies came from Gaboon, where it is also said to be confined to thick forest. It has been collected by Du Chaillu, on the Muni and Kamma rivers, and by Marche, at Dumé, in the Ogawe district; while Bates has sent a fine series to the British Museum from Camaroon, which enabled Sharpe to point out the difference between the two subspecies.

The following is a list of the examples in the British Museum:—

C. sabini—*Sierra Leone* (Sabine, type), Bo (Kemp); *Gold Coast Colony*, Fantee (Ussher), Accra (Haynes), Wassam (Blissett), Prahsu, Kwisa (Alexander).

C. s. melanoleucus—*Cameroon*, Efulen and River Ja (Bates); *French Congo*, Como River (Bates), Gaboon (Walker); *Portuguese Congo*—Iroondo (Bouvier).

Genus IV. TSCHAGRA.

Bill as in *Laniarius*, rather stout and a little compressed, notched and hooked; in other structural characters resembling *Laniarius*, but readily distinguished by its characteristic plumage, in which the greater part of the wings are rich chestnut. The sexes are alike and the tail-feathers are always strongly tipped with white.

Type.

- Pomatorhynchus, (non Pomatorhinus Horsfield) Boie,
 Isis, 1826, p. 973 *T. tschagra*.
 Tschagra, Lesson, Traité d'Orn. p. 373 (1831) *T. tschagra*.
 Telephonus (non Telophorus Swains.), Swains. Class. B.
 ii. p. 219 (1837) *T. senegalus*.
 Harpolestes, Cab. Mus. Hein. i. p. 70 (1850) *T. tschagra*.

There has been some controversy in regard to the name of this genus. English writers have usually used *Telephonus* and German writers *Pomatorhynchus*. The former was used previously by Swainson under a slightly different form (*Telophorus*) for the Backbakiri, and the latter does not seem to have been intended by Boie for a new generic name at all; it was a misprint or an intentional correction of the name given previously by Horsfield to the scimitar-bills *Pomatorhinus* of the Oriental region. The oldest name about which there can be no dispute is therefore *Tschagra* of Lesson.

This genus contains nineteen distinguishable forms. Eighteen of them inhabit Tropical and South Africa and are found within the limits of the Ethiopian region. The remaining species *T. cucullata* is found in North Africa, in Algeria and Morocco; it is distinguishable from *T. senegala* only by subspecific characters.

KEY TO THE SPECIES.

a. Crown black.

a¹. Central tail-feathers faintly but distinctly cross-banded with dusky.

a². Under parts washed with grey *senegala*.

b². Under parts milky-white *remigialis*.

b¹. Central tail-feathers plain, dusky to black, not cross-banded, under tail-coverts grey, white tipped.

c². Larger, wing about 3·4; darker above *erlangeri*.

d². Smaller, wing about 3·0; paler above *habessinica*.

e². Smaller, wing about 3·0; darker above *percivali*.

b. Crown brown.

c¹. No black band down the centre of the crown.

- Ibis, 1909, p. 500 *Br. E. Afr.*; Chubb, Ibis, 1909, p. 162 *Bulawayo*; W. Selater, Ibis, 1911, p. 284.
- Pomatorhynchus senegalus, Reichenow, Vög. Afr. ii. p. 547 (1903); Sharpe, Handl. B. iv. p. 299 (1903); Erlanger, J. f. O. 1905, p. 693 *Somaliland*; Kemp, Ibis, 1905, p. 234 *Sierra Leone*; Jackson, Ibis, 1906, p. 552 *Toro*; Neave, Manc. Mem. 41, No. 10, p. 75 (1907) *N.-E. Rhodesia*; id. Ibis, 1910, p. 228 *N.-W. Rhodesia*; Swynner-ton, J. S. Afr. Orn. Union, 1911, p. 6 *Gazaland*; Reichenow, D. Zentr. Afr. Exped. iii. p. 310 (1910); id. Mittl. Zool. Mus. Berl. v. p. 222 (1911) *Camaroon*.
- Lanius erythropterus, Shaw, Gen. Zool. vii. p. 301 (1809) *Senegal*.
- Telephonus erythropterus, O. Grant, Trans. Zool. Soc. xix. p. 337, pl. xix, figs. 21, 23, eggs (1910) *Ruwenzori*; Bannerman, Ibis, 1910, p. 688 *Bt. E. Afr.*
- Lanius coronatus, Vieill. N. Dict. d' Hist. Nat. xxvi. p. 140 (1818).
- Tschagra senegalensis, Lesson, Traité d'Ornith. p. 373 (1831) *Senegal*.
- Pomatorhynchus orientalis, Cab. Decken Reise iii. p. 27 (1869) *Mombasa*; Oberholser, P. U. S. Nat. Mus. xxx. p. 810 (1906) *Mombasa*.
- Pomatorhynchus senegalus orientalis, Dearborn, Publ. Field Mus. Ornith. i. p. 178 (1909) *Bt. E. Afr.*
- Pomatorhynchus senegalus armenus, Oberholser, P. U. S. Nat. Mus. xxx. p. 809 (1906) *Taveta B. E. A.*; Sjöstedt, Kilimandjaro-Meru Exped. i. p. 112 (1910).
- Telephonus senegalus senegalus, p. 374, T. s. erythropterus, p. 376, T. s. orientalis, p. 376, T. s. armenus, p. 377, T. s. pallidus, p. 375 *Accra*; T. s. camerunensis, p. 375 *Camaroon*; T. s. rufofuscus, p. 376 *N. Angola*; T. s. catholeucus, p. 377 *South Somaliland*; Neumann, J. f. O. 1907.

Adult. Upper half of head black, with a broad buff eyebrow fading into white in front of the eye; hind neck and mantle ochraceous brown, passing into ashy brown on the lower back, upper tail-coverts and centre pair of tail-feathers, these latter with numerous narrow almost obsolete bars of darker; remainder of tail black, with broad white ends to the feathers and margins to the outermost; wings bright cinnamon-red, with the centre portion of the feathers of the scapulars, inner greater coverts and secondaries black, and the inner webs of the primaries blackish brown, with some rufous buff margins; under wing-coverts rufous buff of a more dusky shade towards the primaries and a white edging to the bend of the wing; cheeks and under parts mostly white, shading into deep buff on the ear-coverts and sides of neck and into pale buff on the thighs and under tail-coverts, and the crop and flanks shaded with ashy grey. "Iris light grey to violet-grey;

bill black; tarsi and feet pale grey" (G. Marshall). Total length 9.0 inches, culmen 0.85, wing 3.4, tail 4.4, tarsus 1.1. Gambia (Moloney).

Nestling. Closely resembling the adult with a black crown; bill grey-brown, irides and feet pale grey. Gazaland (Swynnerton).

The Black-headed Tschagra is found throughout the greater part of Africa from Senegal, Uganda and British East Africa to Cape Colony. It is represented in North-east Africa, North Africa from Morocco to Tunis and in Arabia by very closely allied species which would perhaps be more properly considered as subspecies.

Linnaeus's description of the present species was based wholly on one of Brisson's, whose type specimen was sent by Adamson from Senegal to Reamur in Paris, and Senegal is therefore the typical locality.

Recently Neumann has attempted to separate the present form into a number of subspecies. I have been able to examine a very large series in the British Museum and find that although there is a good deal of variation in the colour shade of the back and mantle and also in the superciliary stripe it is by no means constant even in a series from the same locality, and I am inclined to agree with Hartert and Reichenow and to regard this as a single wide-ranging form, though for convenience of reference I give here a list of the subspecies recognized by Neumann.

T. s. senegala—Type locality Senegal; distribution Senegal to Liberia; superciliary stripe pale yellow; yellowish-brown above, nearly white below.

T. s. pallida—Type locality Accra, Gold Coast Colony; distribution Gold Coast, Togoland and Southern and Northern Nigeria; above paler almost ashy-grey; below more grey.

T. s. camerunensis—Type locality Jaunde, Camaroon; distribution Camaroon and Gaboon; darker reddish above, darker than *pallida* below; superciliary stripe richer yellow.

T. s. rufofusca—Type locality Ngungo, Angola; distribution Congo region to central Angola; like the last, but still darker, superciliary stripe orange-yellow.

T. s. erythroptera—Type locality Gamtoos River, Cape Colony; distribution, South Africa to the Limpopo; like the Senegal bird, but a darker grey below.

T. s. orientalis—Type locality Mombasa, British E. Africa; distribution, coastlands of German and British E. Africa to Mombasa; smaller than the South African bird, wing under 3·4.

T. s. armena—Type locality Taveta, British E. Africa; like the Senegal form, but more reddish above, below washed with buffy.

T. s. catholeuca—Type locality Karo Lola, S. Somaliland; pale above, very white below.

The Black-headed Tschagra is abundant throughout most of West Africa. Dr. Rendall found it the commonest Shrike on the Gambia. Dr. Büttikofer records it as generally distributed over Liberia among the scattered bushes of the open country, and this preference for the scattered bushes of the plains of Accra to the dense underwood near Cape Coast was very evident to me when I was on the Gold Coast. Drs. Reichenow and Lühder found the species breeding at Accra in September. Alexander obtained specimens at Kintampo, Gambaga and Pong, and it has been procured at many places in Togoland. Major J. H. Ewart obtained a specimen at Lagos and according to Dr. Hartert's notes from Nigeria it is abundant at Loko. It has been recorded from Jaunde and south-western Camaroon but not from Gaboon, although it is fairly plentiful further south down the West Coast until we reach western Cape Colony, whence it has not yet been recorded. Mr. Monteiro while he was at Kambambe found the species abundant there and known to the natives as the "Quioco."

Anchieta records its native name at Quindumbo as "Xioco," which is probably only a different spelling for the same word, and Capello and Ivens record its name at the Rio Coroca as the "Bala." Andersson writes: "I only found this species in the northern parts of Damaraland and after I had passed the northern boundary of that country; it was very shy and never plentiful. It has been recorded from the Kalahari by Fleck."

In Cape Colony this Shrike is apparently confined to the eastern portion; here Layard found them not uncommon near Grahamstown and at the Kowie River. Mr. Rickard notes its occurrence at Port Elizabeth and East London and Shortridge in Pondoland.

Mr. W. L. Selater informs us that the species is called in the Zulu and Swazi language "Inqupan," and he writes: "According to Messrs. Woodward it lays four largish eggs smeared with grey. The nest is an ordinary one, covered with lichen and placed in a tree. An egg in the South African Museum, taken by Mr. W. Lucas near Rustenburg in December, 1881, is white, beautifully marked with pale purple blotches, and reddish-brown streaks fairly evenly distributed, but slightly thicker at the obtuse end. The egg measures 0.95×0.72 ." Mr. Nehrkorn describes their eggs as white, with hieroglyphic-like scrawls of violet and deep grey, most numerous towards the thick end and measuring 0.95×0.75 .

Mr. T. Ayres writes from Natal: "This species frequently builds amongst a mass of tangled creeping plants, merely placing the nest on or amongst them, either not at all adhering to them, or very slightly indeed." Later on he remarks: "Its flight is weak and it therefore trusts more to hiding for safety in the matted coverts; its note is harsh; the food consists, I believe, entirely of insects; during its

short flight the tail is frequently expanded, which gives the bird rather a showy appearance."

In Mashonaland, according to Mr. Guy Marshall, it is "a plentiful resident, being generally found in pairs in the denser parts of the bush." Alexander writes from the Zambesi: "This species takes the place of *T. minor*, to a great extent, on the higher reaches of the river from Zumbo onward. There is no difficulty in identifying this large Shrike, while its habits, too, are somewhat different. Unlike *T. minor*, it never sings on the wing, but always when stationary; and further it does not on the approach of the breeding-season make a 'whirring' sound with the wings. It is altogether of a more retiring nature. The song, uttered from some thicket, is melodious, and might be rendered 'tu-tu-tui-tui' constantly repeated."

Mr. C. F. M. Swynnerton writes from Gazaland: "Every year, it is said, in December, Gungunyana would decree the singing of a certain song throughout the land for about six weeks, and at the end of this period indulge in a great slaying, after which the song was not to be sung again till the following year. It appears that after one of these annual massacres the bird's song was interpreted by the youngsters of the royal kraal as 'Inkos indiwe uhwa-ita' (King, it was you who did it). This, combined apparently with a fancied resemblance to the tune of the forbidden song, roused the chief's ire and he ordered that for the future every native finding an 'Umqubane' (Singuni name for this species) was to slay it; a fairly systematic destruction of the bird is said to have resulted, but, like the Blue-buck of Chirinda, also stated to have been destroyed wholesale by Gungunyana, they have since made up for lost time.

"The nest, which is usually placed in some small tree, a few feet from the ground, is somewhat slightly built but strong,

and the cup is shallow, that in my collection measuring 1·5 inches in depth and 2·5 by 3·5 in diameter, inside measurement. This nest is composed externally of dry weed-stems, a small frond of bracken, and, about the upper portion, a liberal allowance of spider's web, and is lined with fine roots. The full clutch consists of three eggs, white in ground-colour and irregularly streaked, spotted and pencilled, chiefly about the larger end, and occasionally in the form of a zone, with brown, dark or pale yellowish or reddish (more usually the latter) and similar but paler underlying markings of grey, usually purplish in tone. In size they vary from 0·94 to 1·04 × 0·7 to 0·76."

Chubb took a nest near Bulawayo on December 9, and gives a very similar account; Haagner and Ivy also describe and figure an egg taken near Grahamstown. The last named states that the nest is very often placed between two aloe leaves. The bird is well represented in the British Museum from various localities north of the Zambesi as far as Mombasa and Ruwenzori; Gurney obtained it near the Athi River in British East Africa; he found it only in dense underwood and states that if flushed it would fly off with two or three harsh metallic notes to the nearest available cover. In the bill of one shot a large red beetle was found.

The members of the recent Ruwenzori Expedition found this Tschagra very numerous throughout the acacia country at the south end of Ruwenzori and in the Semliki Valley. It was breeding in May and June. A nest, containing three eggs, was composed of small sticks and roots, and lined with finer roots; it was placed in a low acacia-bush about three feet from the ground. The eggs, which are figured in the report of the Expedition, are a slightly pointed oval in form and glossy in texture; the colour is white with irregular dots and streaks

of maroon, red and purplish-grey; the measurements average 0.93×0.70 .

The following is a list of the chief localities whence this species is represented in the British Museum.

Senegal (Bouvier, Cole); *Gambia* (Moloney and Whitely); *Portuguese Guinea*—Gunnal (Ansorge); *Sierra Leone* (Sabine and Kemp); *Gold Coast Colony*—Cape Coast and Accra (Buckley, Shelley and Ussher), Gambaga and Kpong (Alexander); *S. Nigeria*—Agoulerie (Kemp), Lagos (Ewart); *N. Nigeria*—Ibi, Takum, Ziam and Lake Chad (Alexander); *French Congo*—Shari River (Alexander); *Portuguese Congo* (Sperling); *Angola*—Malanje, N'Dalla Tondo (Ansorge), Benguella (Monteiro), Caconda (Anchieta); *German S.-W. Africa*—Cunene River and Elephants Vley (Andersson); *Cape Colony*—Elands Post (Atmore), King William's Town (Trevelyan); *Natal*—Durban (Gordge and Ayres); *Zululand* (C. Grant); *Transvaal*—Zoutspansberg and Barberton (C. Grant) Rustenburg (Ayres), Swaziland (Buckley); *S. Rhodesia*—Hunyani (Clark), Chiquaqua (Sowerby), Salisbury (Marshall), Gazaland (Swynnerton), Pandamatenka (Oates); *Portuguese East Africa*—Inhambane and Beira (C. Grant), Zambesi Kafue to Tete (Alexander), Rovuma River (Thomson); *Nyasaland* (Whyte, Johnston and Sharpe); *German E. Africa*—Usambara (Kirk), Dar-es-Salaam (Buxton); *British E. Africa*—Mombasa (Buxton and Hildebrandt), Lamu and Melindi (Kirk), Teita (Hunter), Kitui (Hildebrandt), Naivasha and Kenia (Delamere), Ravine (Jackson); *Uganda*—Butiaba (Jackson), Ruwenzori (Ruwenzori Expedition).

Tschagra remigialis.

- Telephonus remigialis*, Finsch and Hartl. Vög. O. Afr. p. 340 (1870) *Abyssinia*; Gadow, Cat. B. M. viii. p. 128 (1883); Shelley, B. Afr. i. No. 753 (1896); Butler, Ibis, 1905, p. 329 *Blue Nile*; Koenig, Ber. V. Internat. Orn. Kongr. 1910, p. 536 *White Nile*.
Pomatorhynchus remigialis, Reichen. Vög. Afr. ii. p. 551 (1903); Sharpe, Handl. B. iv. p. 300 (1903).

Telephonus senegalus remigialis, Neumann, J. f. O. 1907, p. 372.

Pomatorhynchus galtoni, Finsch and Hartl. Vög. O. Afr. p. 340 (1870)

White Nile (nom. nud.)

Adults. Similar to *P. senegalus*, but paler, and distinguished by the hind neck and mantle being of a more sandy shade; quills with a considerable portion of their bases entirely rufous, and the lesser coverts more completely rufous, so that the closed wing is almost entirely rufous; central tail-feathers dark brown, and as a rule, hardly showing their cross-banding; under parts white with no shade of grey and the crop, like the thighs and under tail-coverts, with a slight buffy wash. Iris bluish-grey (in some examples hazel), bill black, feet greenish-ash. Total length 9.0 inches, culmen 0.80, wing 3.5, tail 4.1, tarsus 1.25. Kaka, ♂, 2. 3. 01 (Hawker).

The Sandy Tschagra ranges over the Egyptian Sudan from near the Junction of the Nile and the Atbara River, south to Fashoda and west to Kordofan.

It was first distinguished by Rüppell as a variety of *Lanius erythropterus* from Kordofan (N. Wirbelth, p. 32). Finsch and Hartlaub's type was said to be from Abyssinia, more probably it was from the Upper Blue Nile.

Of recent years it has been met with by Witherby and Hawker on the Upper White Nile above Khartum, and by Rothschild and Wollaston below Khartum at Shendi.

Witherby describes the actions of this bird as beautiful and fascinating. It leaves a tree with a downward swoop, then glides gently up with tail and wings outspread, singing as it rises. Rothschild and Wollaston found this species haunting the very densest scrub and state that it was one of the most shy and retiring birds they met with. They often heard its piping whistle long after sunset. Butler, who took an example at Wad Medani on the Blue Nile, states that it is common throughout the Sudan except in the swamps of the Upper Nile. It is met with far from water in the scrub-thorn on the western sand regions (*i.e.*, in Kordofan). Koenig met with this Tschagra all along the White Nile between Wadi

Halfa and Khartum and took a clutch of eggs, but gives no details. Owing to its habit of skulking in thick bush he heard it much oftener than he saw it.

The British Museum has examples from the following localities, all in the *Egyptian Sudan*—Shendi (Rothschild and Wollaston), Senaar (Dunn and Hedenborg), Kordofan (Stockholm Museum), Kaka and Fashoda (Hawker).

Tschagra habessinica.

Lanius senegalus var. *habyssinica*, Hempr. and Ehr. Symb. Phys. i. fol. e. (1828) *Abyssinian coastlands*.

Telephonus senegalus habessinicus, Neumann J. f. O. 1907 p. 372; Zedlitz J. f. O. 1910, p. 796 *Eritrea*.

Laniarius blanfordi, Sharpe, in Layard's B. S. Afr. p. 397 (1882) *Anseba*.

Telephonus blanfordi, Gadow, Cat. B. M. viii. p. 127, pl. 2 fig. 2 (1883); Shelley, B. Afr. i. No. 752 (1896).

Pomatorhynchus blanfordi, Reichen. Vög. Afr. ii. p. 550 (1903), iii. p. 833 (1905); Sharpe, Handl. B. iv. p. 300 (1903).

Subspecies a.—Tschagra erlangeri.

Telephonus senegalus erlangeri, Neumann, J. f. O. 1907 p. 373 *Abaja Lake*; Koenig, Ber. V. Intern. Orn. Kongr. 1910, p. 511 *Bahr el Ghazal*.

Telephonus blanfordi (non Sharpe), O. Grant, Ibis, 1904, p. 265 *S. Abyssinia*.

Pomatorhynchus blanfordi (non Sharpe), Erlanger, J. f. O. 1905, p. 692 *Shoa*; Oates and Reid, Cat. B. Eggs, B. M. iv. p. 293, pl. xii. fig. 17, 20 (1905).

Pomatorhynchus senegalus habessinicus (non Hempr. and Ehr.), Neumann, J. f. O. 1905, p. 220 *Shoa*; O.-Grant, Ibis, 1907, p. 588 *Sobat River*.

Adults. Similar to *T. senegala*, from which it differs in the upper parts being slightly darker, the back of a more earthy shade, and in the thighs and under tail-coverts being dark grey like the flanks, but with some white ends to these feathers; the banding of the tail, so conspicuous in *T. senegalus*, is very obscure and often quite absent; the eye stripe is white in front and only faintly tinged with buff behind the eye, sometimes almost as pale as the front portion. "Iris brown, with white spots varying from three to six in number; bill black; legs light slate colour" (Lovat). Total length about 8.5 inches, culmen 0.85, wing 3.4, tail 4.2, tarsus 1.2. Akaki R., ♂, 18. 3. 02 (Degen).

Immature. Has the crown mingled brown and black; the tail more conspicuously banded and the bill paler.

The Abyssinian Tschagra ranges over north-east Africa from Eritrea through Abyssinia south to Lake Margerita, and west to the Sobat, and the region of the Upper Nile near the junction of the Giraffe River.

It was first distinguished by Hemprich and Ehrenberg from the widespread *T. senegala* by its smaller size, but the most noticeable character is the absence or faintness of the banding of the central tail-feathers and the curious coloration of the iris; the latter characteristic was first noticed apparently by Blanford, who found it a common bird on the highlands of Anseba and Tigre above 4,000 feet. He describes it as a skulking, bush-loving species, with the flight and habits of the Bush Babbler (*Argya*).

Heuglin also writes at length about this species and *H. remigialis* in much the same strain; he found a nest in Bogosland in September, 1861, while recently Zedlitz has obtained good series of examples from the same region.

In the south of Abyssinia, in the neighbourhood of Harrar, Addis Ababa, and specially the Lake District to the south and the Arussi Galla country, it seems to be very abundant, and has been met with by Lord Lovat, Pease and Degen, as well as by Antinori, Erlanger and Neumann; the latter distinguishes these southern Abyssinian examples as a distinct subspecies by their larger size (wing 83 to 86 mm., *i.e.*, 3·3 to 3·4 against 76 to 78 mm., *i.e.*, 3·0 to 3·1) and their somewhat darker colour, and gives as the type locality "Abaja See," *i.e.*, Lake Margerita in south Abyssinia. He names this form *Telephonus senegalus erlangeri*.

An examination of the series in the British Museum confirms Neumann's conclusions, though the distinctions are not very marked, nor are they by any means constant.

Erlanger found this species very common, and breeding in the coffee plantations at Harrar. He took two nests on May 7 and 9, 1900. Each nest contained three eggs, rather hard set. The nests were chiefly constructed of fine rootlets with some dry stalks of plants worked in on the outer side. Eggs of this species, also taken at Harrar by Zaphiro in June, are described and figured by Messrs. Oates and Reid. The ground colour is pure white, spotted, blotched and generally scrawled with purplish brown and lavender. They measure 0.90×0.66 .

The following examples in the British Museum have been examined :—

T. habessinica : Eritrea—Anseba Valley and Senafé (Blandford), Bejook (Jesse), Bogosland (Esler).

T. habessinica erlangeri : Abyssinia—Shoa (Antinori), Harrar, Hülül, Addis Ababa, Melkadegaga (Pease), Harramaier, Mannibulla, Quala, Akaki, Hiressa (Degen), Laga Hardim, Gelongol (Lovat), Harrar (Zaphiro); Egyptian Sudan—Baro River (Zaphiro), mouth of Zeraf River (Dunn).

Tschagra percivali.

Telephonus percivali, O-Grant, Bull. B.O.C. x. p. 50 (1900), and Nov. Zool. vii. p. 251 (1900) *Lahej*.

Adult. Closely resembling *T. habessinica*, but smaller in dimensions, and specially the bill. Under parts distinctly of a darker shade of slaty; wings with less rufous, especially along the inner edges of the quills, where it is almost entirely absent. Iris brown, bill black, legs grey. Length 7.5 inches, wing 3.0, tail 3.5, culmen 0.8, tarsus 1.0. Al Milah, type ♂, 16.8.99 (Percival and Dodson).

Percival's Tschagra is only known from the type specimen obtained by Messrs. Percival and Dodson at Al Milah, north of Lahej, not very far from Aden in southern Arabia. In size it more nearly resembles the typical form of *T. habessinica*, but in coloration the southern *T. erlangeri*.

Tschagra australis.

- Melaconotus australis*, Smith, Rep. Exp. Centr. Afr. 1836, p. 44 *N. of Kurrichaine*.
- Pomatorhynchus australis*, Reichen. Vög. Afr. ii. p. 544 (1903); Sharpe, Handl. B. iv. p. 300 (1903); Oates and Reid, Cat. Eggs B.M. iv. p. 293 (1905); Neave, Manch. Mem. li. No. 10, p. 75 (1907) *Loangwa valley*; Sharpe, Ibis, 1908, p. 335.
- Telephonus australis*, Shelley, B. Afr. i. No. 754 (1896); Stark and W. Sclater, Bds. S. Afr. ii. p. 22 (1901); Haagner, Bull. B.O.C. xix. p. 22 (1906) *eggs*; Neumann, J. f. O. 1907, p. 371; Swynnerton, Ibis, 1908, p. 50 *Gazaland*; Chubb, Ibis, 1909, p. 162 *Bulawayo*; Jourdain, J. S. Afr. Orn. Union, 1908, p. 42.
- Telephonus trivirgatus*, Smith, Ill. Zool. S. Afr. pl. 94 (1844); Gadow, Cat. B.M. viii. p. 122 (1883).
- Telephonus frenatus*, Licht. Nom. p. 12 (1854).

Subspecies a.—Tschagra ussheri.

- Laniarius ussheri*, Sharpe ed. Layard's B. S. Afr. p. 397 (1882) *Volta R.*
- Telephonus ussheri*, Gadow, Cat. B. M. viii. p. 124, pl. 2, fig. 1 (1883); Shelley, B. Afr. i. No. 757 (1896); Kemp, Ibis, 1905, p. 234 *Sierra Leone*.
- Pomatorhynchus ussheri*, Sharpe, Handl. B. iv. p. 300 (1903); Sharpe, Ibis, 1908, p. 336.
- Pomatorhynchus australis ussheri*, Reichen. Vög. Afr. ii. p. 545 (1903).

Subspecies b.—Tschagra minor.

- Telephonus minor*, Reichen. J. f. O. 1887, p. 64 *Kagehi*; Butler, Ibis, 1908, p. 227 *Bor*.
- Pomatorhynchus minor*, Sharpe, Handl. B. iv. p. 300 (1903).
- Pomatorhynchus australis minor*, Reichen. Vög. Afr. ii. p. 547 (1903); Sjöstedt, Kilimandjaro-Meru Exped. i. p. 112 (1910).

Subspecies c.—Tschagra emini.

- Telephonus australis emini*, Reichen. Orn. Monatsb. 1893, p. 60 *Bukoba*.
- Pomatorhynchus australis emini*, Reichen. Vög. Afr. ii. p. 547 (1903); id. Deutsch. Zentr. Afr. Exped. iii. p. 310 (1910).
- Telephonus emini*, Shelley, B. Afr. i. No. 755 (1896); Ogilvie-Grant, Trans. Zool. Soc. xix. p. 337 *Ruwenzori*.
- Pomatorhynchus emini*, Sharpe, Handl. B. iv. p. 300 (1903).
- Telephonus australis dohertyi*, Neumann, J. f. O. 1907, p. 370 *Escarpment*.
- Pomatorhynchus australis dohertyi*, Dearborn, & Field Mus. Publ. Orn. i. p. 179 (1909) *B.E.A.*

Subspecies d.—Tschagra congener.

- Pomatorhynchus australis congener*, Reichen. J. f. O. 1902, p. 258 *Nyasa-land*; id. Vög. Afr. ii. p. 546 (1903).

Pomatorhynchus congener, Sharpe, Handl. B. iv. p. 300 (1903).

Telephonus australis congener, Selater, Ibis, 1911, p. 286 *Coguno*.

Telephonus minor (non Reichen.) Stoeck and W. Selater, J. S. Afr. Orn. Union, 1906, p. 95 *Zambesi Valley*.

Subspecies c.—Tschagra frater.

Pomatorhynchus australis frater, Reichen. J. f. O. 1902, p. 258 *Cameroon to Loango*; id. Vög. Afr. ii. p. 546 (1903); Bates, Ibis, 1909, p. 33; Reichen. Mitt. Zool. Mus. Berlin, v. p. 222 (1911) *Cameroon*.

Pomatorhynchus frater, Sharpe, Handl. B. iv. p. 300 (1903); Sharpe, Ibis, 1908, p. 335 *Cameroon*.

Adult. Forehead, crown, and back dark ashy brown, the crown often a little darker and faintly streaked with dusky; centre pair of tail-feathers dusky, cross banded with numerous black bands, sometimes rather obscure; rest of the tail-feathers black with broad white tips and white outer margins to the two outer pairs only; wing bright cinnamon, with the central portion of the feathers of the scapulars, the inner greater coverts and the secondaries black; inner webs of the primaries blackish brown; under wing-coverts and inner lining of the quills generally faintly washed with rufous; side of the head with a broad buffy eyebrow generally becoming whitish anteriorly, this is separated from the brown of the crown by a band of black, and below by another black band running through the eye; cheeks and ear-coverts greyish fading to white on the chin; rest of the under parts including the under tail-coverts yellowish buff with a slight greyish wash on the flanks. Iris dark red with an outer ring of whitish, bill black, feet lead-colour. Length 7.75 inches, wing 3.1, tail 3.6, culmen 0.70, tarsus 1.05. Rustenburg, ♂, 18. 7. 78. (Lucas).

Immature. Have the bill light horny, not black.

Subspecies T. a. congener. Resembles *T. australis*, but has the back of a less ashy and more buffy shade, the eyebrow paler, nearly white, the under parts paler and whiter, the centre of the abdomen white but the breast, flanks and under tail-coverts a very pale ashy not buffy. Wing 3.0, culmen 0.60. Near Tete, ♂, 25. 8. 98. (Alexander).

Subspecies T. a. frater. Resembling *T. a. congener*, but somewhat darker above and of a more rufous shade of brown; below white on the centre of the abdomen and chin, the breast and flanks washed with olivaceous ashy, the under tail-coverts faintly tinged with buffy; bill longer and stouter. Wing 3.1, culmen 0.75. River Ja, ♂, 23. 5. 04. (Bates).

Subspecies T. a. emini. Hardly distinguishable from *T. a. frater*, except that the ashy wash of the under parts is more olivaceous, and extends over the sides of the body and the under tail-coverts, while the breast is as a rule ashy without olivaceous. Wing 3.3, culmen 0.75. Ruwenzori, ♂, 14. 5. 06. (Dent).

Subspecies T. a. minor. Like *T. a. emini*, but the sides of the body and under tail-coverts pale buffy ochraceous, fainter on the breast, and altogether rather smaller, intermediate between *T. a. emini* and *T. a. congener*, with which it agrees in size. Wing 3.0. Kilimanjaro, ♂, 16. 6. 10 (Kemp).

Subspecies T. a. ussheri. Hardly separable from *T. a. frater* and *T. a. emini*, except by its smaller size and its under parts with less olive and more ashy. Wing 2.8, culmen 0.70. Volta River, type, 1870 (Ussher.)

This species was originally discovered by Sir A. Smith when he made his journey to "Central Africa" in 1834. He found it near Kurrichane in what is now the Rustenburg district of the Transvaal. The subspecies as now restricted ranges from Griqualand West north of the Orange River, to the north of Angola on the west and to Gazaland on the east.

Andersson found it by no means uncommon in southern Damaraland, where it confines itself to dense thickets and low bushes. It hops about incessantly, flitting rapidly from twig to twig and passing out of sight almost at once. Andersson found two nests in the month of January; they were composed of stalks of plants loosely put together and lined with stalks of a similar kind; both nests were in low bushes and contained three eggs; they were obtained at Ondonga and are now in the British Museum. Eriksson found similar nests in the Tebra country near Lake Ngami (Stark and Selater, p. 23), Haagner on the Crocodile River in the Pretoria district and Capt. Jourdain about 18 miles east of Pretoria on September 18. The eggs are white with irregular purplish brown streaks and scrawls, and underlying leaden grey markings, and average about 0.85×0.65 .

Swynnerton found this subspecies common on the borders of the South Melssetter district of southern Rhodesia, where it is called "Umqubana" by the natives. He found it moving about quickly at the edge of the bush, or feeding along the ground and at once disappearing into dense bush or thick herbage when seen. Three stomachs examined contained grasshoppers, a mantis case, beetles, and other insect debris.

Along the Zambesi Valley from Zumbo downwards, and perhaps extending north to Nyasaland, and south to Inhambane, a somewhat smaller form with paler and more ashy under parts takes the place of *H. australis*. Alexander (Ibis, 1899, p. 582) writes as follows in regard to this form which he calls *Telephonus minor*, but which seems more properly referable to *T. a. congener*: "This Shrike keeps to long grass and thick bushes, imitating when pursued the call-note of a quail. In the breeding season the male bird will continually rise up with a whirring sound of the wings vertically into the air, and then drop to earth again in a curious manner as if it had suddenly lost control of its flight, and was endeavouring to reach the ground the best way it could, uttering the whole time a string of musical notes, descending in scale, the rendering of which is very true."

In German East Africa is found another subspecies, *T. a. minor*, perhaps a little more buffy in tone below and slightly smaller. It was described by Reichenow from examples collected at Kagehi on the south-east corner of Victoria Nyanza by Fischer, whence it extends south to the Usufua district between Lakes Tanganyika and Nyasa. It appears to me very doubtfully distinct from *T. a. congener*, but I have been able to examine very few examples of this form.

Still further north in Uganda and the western portion of British East Africa, and ranging westwards to Ruwenzori and the Niam Niam country between the River Shari and the Ubangi in French Congo, is another larger subspecies, *T. a. emini*, described by Reichenow from an example obtained by Emin Pasha at Bukoba, on the western shore of Victoria Nyanza. It is quite a different looking bird from *T. a. congener*, showing a strong wash of olivaceous on the flanks, while it is without doubt identical with Neumann's *H. a. dohertyi*.

In German Camaroon is found *T. a. frater* which comes

very near *T. a. emini*, but appears to be slightly larger and have a larger bill. Of this form Bates writes as follows: "This, called the Nko'o-Bikôtôk, is one of the commonest birds of the 'bikôtôk' or old overgrown clearings, and even in the cassava fields; it is never found in the forest. Like all the common Shrikes of this country, it is a bird of a conjugal disposition and is often seen in pairs. When mating, it (probably the male only) utters a sort of song, which may be said to begin with a trill or rattle, and end with 'keow! keow! keow!' all in a rich, pleasant tone of voice. I have heard it also, while flying from bush to bush, make a sharp whip-snapping sound, apparently with its wings. This noise is made only occasionally, and seems to be, like the song, an expression of amorous feelings, or made to attract attention." Mr. Bates came across several nests. They are in the form of a very shallow cup of dry leaf-petioles, grass and other stems, the finer ones inside, and are thin and light. One was set on the forks of a cassava stem. The eggs are of a regular or slightly pointed oval form and very slightly glossy. They are white sparingly marked, especially at the larger end with blotches, and irregularly shaped spots and lines of brown and various shades of grey. They measure 0.95 × 0.65.

Finally, on the West Coast, in the Gold Coast Colony and Sierra Leone, there is found *T. a. ussheri*, described by Sharpe from an example collected by Governor Ussher on the Volta River. It does not appear to be very common, judging by the very few examples in the British Museum. Dr. Reichenow took a nest of this subspecies near Aguapim in September. In the neighbouring colony of Togoland it has been obtained by Baumann and Count Zech.

The following list of the specimens of this species in the British Museum will best illustrate the geographical distribution of the subspecies:—

T. australis: *Cape Colony*—Griqualand West (Atmore); *Bechuanaland*—Bamangwato (Buckley), Shoshong (Oates), Tati (Jameson); *German S.-W. Africa*—Swakopmund and Otjimbingue (Andersson); *Angola*—Quillengues (Anchieta), Catumbella, Dondo, N'Dalla Tando (Ansorge), St. Paul de Loanda (Lowe); *Transvaal*—Rustenburg (Lucas), Crocodile River (Oates), Petersburg and Zoutspansberg (C. Grant); *Gazaland* (Swynnerton).

T. a. congener: *Portuguese East Africa*—Inhambane (C. Grant), Chicowa and Tete (Alexander), Tete (Livingstone).

T. a. minor: *Nyasaland*—Karonga, north end of Lake Nyasa (Manning); *German East Africa*—Usambara (Kirk), Rombo, Kilimanjaro (Kemp); *British East Africa*—Gazi, south of Mombasa (Kemp).

T. a. emini: *British East Africa*—Kamassia, Ravine, Nandi, Lake Naivasha (Jackson), Likipia (Delamere); *Uganda*—Entebbe, Mount Elgon (Jackson), Ruwenzori (Ruwenzori Exped.); *French Congo*—Ratu River and Ubangi River (Alexander).

T. a. frater: River Ja and Efulen in *Cameroon* (Bates).

T. a. ussheri: Fantee (Swanzy) and Volta River (Ussher), in *Gold Coast Colony*; Rotifink, in *Sierra Leone* (Kemp).

Tschagra tschagra.

Thamnophilus tschagra, Vieill. N. Diet. iii. p. 317 (1816) *ex Levaill.*

Telephonus tschagra, Shelley, B. Afr. i. No. 758 (1896); Stark and W. Sclater, B. S. Afr. ii. p. 21 (1901); Shortridge, Ibis, 1904, p. 182 *Pondoland*; Haagner, Bull. B.O.C. xix. p. 22 (1906); id. J. S. Afr. Orn. Union, 1907, p. 88, pl. iii. fig. 12, *egg*; id. Orn. Monatsb. 1908, p. 32; C. H. Taylor, J. S. Afr. Orn. Union, 1907, p. 19 *Ermelo*; W. Sclater, Ibis, 1911, p. 285 *Plettenberg Bay*.

Pomatorhynchus tschagra, Reichen. Vög. Afr. ii. p. 543 (1903); Sharpe, Handl. B. iv. p. 301 (1903).

Telephonus longirostris, Swains. Classif. B. ii. p. 219 (1837) *nom. nud.*; id. Anim. Menag. p. 282 (1838).

Telephonus australis longirostris, Neumann, J. f. O. 1907, p. 371.

Telephonus erythropterus (non Shaw), Gadow Cat. B. M. viii. p. 121 (1883).

Le Tschagra, Levaillant, Ois d'Afr. ii. p. 81, pl. 70 (1799) *Gamtoos River*.

Subspecies Tschagra natalensis.

Pomatorhynchus tschagra, var. *natalensis*, Reichenow, Vög. Afr. ii. p. 544 (1903) *Durban*.

Adult. — Upper parts brown, with an olive tinge, the crown slightly darker, and less olivaceous, shading into slate-grey on the upper tail-coverts; central pair of tail-feathers dark brown, with obsolete darker bars; remainder of tail black, with broad white ends; scapulars and wings brown, with the outer half of the coverts and the edges of the quills bright deep cinnamon; under surface of wings nearly uniform dusky grey, with a white margin to the bend of the wing; a broad white eyebrow from the nostril to side of nape, partly margined above by a few black feathers on side of crown, and entirely margined below by a jet black band; remainder of sides of head ashy, inclining to white at the eyelid, and towards the chin, and shading into deeper grey on the remainder of the under parts. "Iris brown, bill black; legs grey" (Ayres). Total length 8·0 inches, culmen 0·95, wing 3·2, tail 3·4, tarsus 1·10. Elands Post (Atmore).

Subspecies T. t. natalensis. Differing in the rich rufous brown of the crown and in the rufous wash which covers the back, and in the shorter wing and bill. Wing 3·05, culmen 0·80. Durban, ♂, 1. 11. 75 (Ayres).

Levaillant's Tschagra ranges along the south coast of South Africa from Knysna to Durban.

It was first discovered by Levaillant in the neighbourhood of the Gamtoos River, west of Port Elizabeth. He gives a very fair description of the bird, and a quite recognizable figure, which recently Neumann has endeavoured to put on one side as a "mixtum compositum." Levaillant does not state that the crown of the male is black, but that it is "d'un noir bruni léger teint d'olivâtre." Neumann also endeavours to show that the young bird described by Levaillant is *T. australis* of Smith, but Levaillant never went into the country where *T. australis* is found, and he distinctly states that he never found the Tschagra in the country of the "Namaquois."

I therefore agree with Haagner in retaining for this

species the name given to it by Vieillot founded on Levaillant's description.

Reichenow separates as a subspecies examples from Natal, because of the much richer and more rufous shade of the crown and nape, the slightly more rufous back, and the shorter wings and bills. This is certainly confirmed by the examples in the British Museum.

In Cape Colony this species has been collected at Plettenberg Bay by Claude Grant, near Grahamstown by Ivy, and at Port St. John's by Shortridge. Mr. Layard states that he has received the bird from Nelspoort and Colesberg; but as both these localities are up in the dry and treeless Karroo, I think there must be some mistake about this.

From Natal I have received specimens of this species collected near Durban by Mr. Gordge and Mr. T. L. Ayres, and my friends, Messrs. Butler, Feilden and Reid found it common in the bush between Durban and the Umgeni River. Beyond, it has been recorded from Barberton, by Rendall (Ibis, 1896, p. 171), and from the Ermelo district of the Transvaal by C. H. Taylor, but I have not myself seen examples from the Transvaal.

Little is known of the habits of this species; it appears to be found both in thick forest as well as among mimosa bush in more open country. Ivy states that it has a peculiar whistle, two notes ascending, followed by the same in a descending scale. Levaillant also speaks of its peculiar cry which he syllabled into "Tcha-tcha-tcha-gra," and whence he obtained its name.

Ivy found a nest with three eggs in the Albany district of Cape Colony. They are described by Haagner as creamy white, slightly tinged with lavender, and spotted and streaked with lavender and dark purplish brown; they measure about 0.90 × 0.75, and are sufficiently distinct from those of *T. senegala*.

The British Museum has a very small series of this species, as follows: Plettenberg Bay (C. Grant), and Elands Post (Atmore) in *Cape Colony*, and Durban (Gordge and Ayres) in *Natal*, the latter being referred to *T. t. natalensis*.

Tschagra souzæ.

Telephonus souzæ, Bocage, Journ. Lisb. (2) ii. p. 263 (1892) *Quindumbo*.
 Pomatorhynchus souzæ, Reichen. Vög. Afr. ii. p. 544 (1903); Sharpe, Handl. B. iv. p. 301 (1903).
 Pomatorhynchus australis congener (non Reichen.), Neave, Ibis, 1910, p. 228, *Katanga*.

Subspecies Tschagra ansorgei.

Harpolestes australis ansorgei, Neumann, Bull. B. O. C. xxiii. p. 53 (1909) *Pungo Andongo*.

Adult. Above brown of a rufous shade, crown slightly darker than the back; rump slaty blue; a greyish white eyestripe from the base of the bill to above the ear-coverts, bordered above by a rather ill-defined black band, and below by a very distinct one; cheeks and ear-coverts brownish-grey; wings bright rufous, no black on the scapulars; these and the inner secondaries rufous throughout, not with well-defined rufous edges only, as in *T. australis*; central tail-feathers dark slaty, quite conspicuously narrowly banded with dusky, the others black with white tips; under parts slaty grey, becoming white on the chin and in the centre of the abdomen; under wing-coverts and lining of the quills greyish, edge of the wing white. Iris brownish-violet, bill black, feet slate-blue. Length 7.5 inches, wing 3.0, tail 3.05, culmen 0.70, tarsus 0.90. Bihé, ♀, 4. 12. 04 (Ansorge, in Tring Museum).

Subspecies T. s. ansorgei. Very similar to *T. souzæ*, but the under parts washed with olivaceous (instead of cinereous or slaty), fading almost to white on the chin and centre of the abdomen; wing as in *T. souzæ*. Iris dark brown; bill dark grey, lower mandible pinkish grey; feet slate-blue. Wing 3.05. Pungo Andongo, type ♂, 3. 7. 03 (Ansorge, in Tring Museum).

Souza's Tschagra was first described from Quindumbo in the interior of the Province of Benguella in Angola. So far as one can judge, it takes the place of *T. australis* on the high plateau of the interior. I have examined examples in the Tring Museum from Caiala in the Bihé country (Ansorge) and the north Bailundu country (Pemberton), both localities in the

interior of Angola, while two birds in the British Museum obtained by Neave from the Upper Lualaba and Dikulwe rivers in Katanga are obviously referable to the same species.

Neumann has described as distinct a *Tschagra* with olivaceous under parts from Pungo Andongo, some distance further north in the interior of the Loanda Province of Angola. It seems to me quite possible that this will turn out to be only the immature plumage of *T. sousae*, as the bill in the two examples I have examined is pale, not black, a sure mark of immaturity in this genus. However, until further material is forthcoming it will perhaps be better to leave it as a subspecies.

We have no field notes or information about the habits of this species, except that the native name is recorded by Anchieta as "Xioca" in Benguella.

Tschagra jamesi.

Telephonus jamesi, Shelley, Ibis, 1885, p. 403, pl. 10 *Somaliland*; id. B. Afr. i. No. 759 (1896); Neumann J. f. O. 1907, p. 368; Bannerman, Ibis, 1910, p. 301 *Waghar*.

Pomatorhynchus jamesi, Reichen. Vög. Afr. ii. p. 551 (1903), iii. p. 833 (1905); Sharpe, Handl. B. iv. p. 301 (1903); Erlanger, J. f. O. 1905, p. 694 *Somaliland*.

Subspecies a.—Tschagra mandana.

Telephonus jamesi mandanus, Neum. Orn. Monatsb. 1903, p. 183 *Manda Isl.*; Reichen. Vög. Afr. iii. p. 833 (1905); Neumann, J. f. O. 1907, p. 369.

Subspecies b.—Tschagra kismayensis.

Telephonus jamesi kismayensis, Neumann, J. f. O. 1907, p. 369 *Kismayu*.

Adult. Above brownish ash; a black band of varying width down the centre of the head from the forehead to the nape, and another from the gape through the eye to above the ear-coverts; this is bordered above by a rather indistinct white eyebrow; wing-coverts and broad outer edges to the quills chestnut, a few of the outer coverts brown, margined with white, rest of the quills dark brown; tail with the two centre feathers brownish like the back and obsoletely barred with dusky, the others black

with broad white tips, and white external margins to the outermost pair; under parts ashy grey becoming white on the throat and abdomen, and pale buffy on the under tail-coverts; under wing-coverts and lining of the quills ashy brown, edge of the wing white. Iris brown with five or six white spots round the pupil; bill black, feet grey. Length 7.25 inches, wing 2.7, tail 3.1, culmen 0.60, tarsus 0.85. Somaliland, type (L. Phillips).

T. j. mandanus. Differing from the typical form in the sandy not ashy brown shade of its upper parts, while the sides of the crown are much paler. Iris with 10 white spots. Wing 2.7. Manda Island, type ♀, 13. 11. 85 (Jackson).

T. j. kismayensis. "Much paler above, especially on the head, but ashy not sandy; below pure grey without any olive tone" (Neumann).

James's Tschagra was discovered by Mr. E. Lort Phillips during his first journey to Somaliland along with Messrs. James, Aylmer, and Thrupp in 1884-5. No exact locality is given, but the bird is stated to have been observed on two occasions on the high plateau of the interior to the south of Berbera, and one of these examples is now in the British Museum.

Neumann has divided this species into three races, as follows:—

T. jamesi jamesi. Central and western Somaliland to Turquel, near Mount Elgon, in eastern Uganda, and south to Teita on the borders of German East Africa.

T. jamesi kismayensis. From the lower valley of the Juba river and Kismayu.

T. jamesi mandanus. From Manda Island, Witu, and the neighbourhood on the coast of British East Africa.

An examination of the series of this species in the British Museum, and in Mr. Jackson's collection, enables me to confirm Neumann's conclusions.

The typical form of the species has also been met with by Elliot at Hullier, and by D. Smith at Bussarler in western Somaliland, and by Bury at Waghar on the northern plateau.

Erlanger found this bird very plentiful from Ginir in central Somaliland, southwards along the valley of the Juba River to Kismayu; and on the examples obtained by him in the lower valley of this river Neumann described *T. jamesi kismayensis*. Erlanger observed the birds generally in pairs slipping in and out of the undergrowth. He found it nesting on several occasions between March 23 and April 6, and took the eggs. The nest was quite low down, generally in an acacia bush, and was easily seen. It was small and flat, and constructed of grass stems and rootlets. The eggs, two to three in number, were very glossy and milky-white, with violet scale-like blotches and brown spots, chiefly at the larger end. They averaged about 0.9×0.6 .

In East Africa this bird was met with by Jackson at Turquel in the Sük country north of Mount Elgon. He found it plentiful in the open bush, and subsequently, in 1892, he met with it on the Tsavo River, in the desert country in the south-east corner of British East Africa. He writes: "This is the first specimen that I have procured so far south, and I am inclined to think that the Rivers Tsavo and Sabaki are probably its southern limit. At Lamu it is very common, and it is also very plentiful in the bushy country of Karakan, a district of the Sük country, which is in the same latitude as Somaliland, where it was first obtained. At Lamu I once found a nest with two young in it. It was placed in a small bush quite exposed to view, and was built of small twigs, fibres, &c., being not unlike that of our Bullfinch."

One of the most remarkable features of this species is the coloration of the iris, which is brown with a series of white spots set round the pupil. The number of these is given by various observers as between five and ten. The other Somaliland Tschagra (*T. habessinica*) also shares this peculiarity, and it is difficult to give any explanation of it.

The following examples in the British Museum have been examined:—

T. j. jamesi.: Somaliland—Plateau south of Berbera and Goolis foothills (L. Phillips), Wagar (Bury); Abyssinia—Lake Stephanie and Hamar Koke (Zaphiro); British East Africa—Teita (Harvey).

T. j. mandana. British East Africa—Manda Isle (Jackson).

In Mr. Jackson's collection are specimens from the following additional localities:—

T. j. jamesi.: Turkwel River, N'waso Nyiro, River Tsavo; *T. j. kismayensis*.: Yonte, near Kismayu; *T. j. mandana*.: Witu.

Genus V. ANTICHROMUS.

Type.

Bocagia, Shelley (non Girard), Bull. B. O. C. iii. p. 43

(1894) *A. minutus*

Antichromus, Richmond, Auk, 1899, p. 186 *A. minutus*.

Closely allied to *Tschagra*, but the bill shorter and stouter; tail without definite white tips, and the sexes distinct, the females always having a white eyebrow.

Two species only, confined to Tropical and South Africa.

KEY TO THE SPECIES.

a. Without a white eyebrow (males).

a¹. Scapulars with a black patch, sometimes black on the mantle as well *minutus* ♂.

b¹. Scapulars completely rufous without black *anchietæ* ♂.

b. A white eyebrow (females).

c¹. Scapulars with a black patch. *minutus* ♀.

d¹. Scapulars without black : *anchietæ* ♀.

Antichromus minutus.

Telephonus minutus, Hartl. P. Z. S. 1858, p. 292 *Ashantee*; Gadow, Cat. B. M. viii. p. 128 (1883); O. Grant, Ibis, 1904, p. 265 *Bure*; 1905, p. 204 *Ankole*; Neum. J. f. O. 1907, p. 368; O. Grant, Trans. Zool. Soc. xix. p. 338 (1910) *Ruwenzori*; Koenig, Ber. V. Intern. Orn. Kongr. 1910, p. 511 *White Nile*.

Bocagia minuta, Shelley, B. Afr. i. No. 749 (1896).

Antichromus minutus, Sharpe, Handl. B. iv. p. 301 (1903); Jackson, Ibis, 1906, p. 553 *Toro*.

Pomatorhynchus minutus, Reichen. Vög. Afr. ii. p. 552 (1903); Neum. J. f. O. 1905, p. 221 *Omo River*; Reichen. Deutsch. Zentral. Afr. Exped. iii. p. 310 (1910) *Lake Kivu*.

Pomatorhynchus hartlaubi, Finsch and Hartl. Vög. Ost. Afr. p. 340 (1870) *nom. nud.* *Ashantee*.

Bocagia potteri, Oust. Bull. Mus. Paris, 1900, p. 225 *Bouré, S.-W. Abyssinia*.

Adult male. Upper half of head, with the exception of the ear-coverts, glossy jet-black; back of neck and the back cinnamon becoming ochraceous on the rump; scapulars and wings mostly bright cinnamon, with a large patch of jet-black on the scapulars; inner webs of quills generally dusky, but shaft-stripes on the inner secondaries black, with broad pale rufous margins, darker than the sandy-buff of the under wing-coverts and axillaries; tail black, with whitish terminal margins to the feathers and a narrow outer edging to the exterior pair of feathers; ear-coverts, cheeks, and upper throat white, shading into rich buff on the remainder of the under parts. Iris pale red; bill black; feet dusky grey. Total length 7.0 inches, culmen 0.8, wing 2.9, tail 3.2, tarsus 1.0. Krache, ♂, 22. 5. 01 (Alexander).

Adult female. Differs in having a broad white eyebrow extending forward to the nostrils, bounded below by a black band through the eye. Wing 2.9. Kpong, ♀ (Alexander).

Immature male. Has the central part of the crown more or less yellow like the back with black shaft-marks, an ochraceous eyebrow and a pale horny bill. Voro, Welle River, ♂, 7. 1. 06 (Alexander).

This species was described by Hartlaub from two specimens in the British Museum, one a female from West Africa, collected by Fraser, the other a male from Ashantee. It ranges from the Gold Coast Colony eastwards through Northern Nigeria to the western half of Abyssinia and south to Portuguese Congo and Uganda.

Shelley and Buckley found this bird rare in the Gold Coast, and only met with it once at Cape Coast Castle, while Alexander states that he did not meet with the species in the hinterland but on the lower reaches of the Volta River from Krachi downwards. "It frequents the low marshy ground, overgrown with high grass, close to the river. The birds were seldom seen during the day, but towards evening may be observed perched on branches of prominent shrubs among the tall grass."

In Togoland it has been obtained by various German collectors, in southern Nigeria by Robin Kemp, and in Camaroon by Alexander, but I have not heard of it in Gaboon until the Cabinda or Portuguese Congo is reached, where it was obtained by Falkenstein and by Lucas and Petit.

In Uganda and the neighbouring regions, Jackson, Ansorge, Doggett, Stuhlman, Emin, Neumann, and Woosnam have all met with this species. The first named found it breeding at Nandi in British East Africa on June 12, 1898, at 6,500 feet. The nest, containing two eggs, was placed in a small bush in a swamp, and was in a very exposed position.

The French Mission under the Marquis de Bonchamps, which in 1896 endeavoured to penetrate from Addis Ababa to the upper waters of the White Nile, obtained this Shrike at Bouré, a place situated in the upper valley of the Sobat River. This specimen was described as new by Oustalet, under the name of *Bocagia potteri*, but is without doubt identical with other Ethiopian examples obtained by Lovat, Degen and Zaphiro, all in the upper Abyssinian valleys of the Blue Nile and its affluents. Neumann, who also collected this species in the Kaffa and Djimma districts of Abyssinia, remarks that he found it in bush at the edge of forest and most commonly

in the cotton and coffee plantations near the villages of the natives. Recently Koenig and le Roi obtained four of these Bush Shrikes in the "Sudd" region of the White Nile near Bor, as well as at Lado and Redjaf still higher up the river.

The following specimens in the British Museum have been examined: *Gold Coast Colony*—Ashantee type (Gould), Fantee (Haynes, Ussher, and Swanzy), Accra (Haynes), Cape Coast Castle (Shelley), Krachi, Kpong and Kintampo (Alexander); *Southern Nigeria*—Agoulerie (Kemp); *Cameroon*—Manenguba (Alexander); *Portuguese Congo*—Massabi (Petit); *Northern Nigeria*—Abeshi, Mutum Biu (Alexander); *French Congo*—Ubangi and Welle rivers (Alexander); *Uganda*—Ruwenzori (Woosnam), Toro (Jackson), Ankole (Doggett) Wadalai (Emin), Lake Kagambah, Lake Mutanda (Kemp); *British East Africa*—Nandi (Jackson); *Abyssinia*—Mendi and Gelangal (Lovat), Bure (Degen), Djimma, Kullo and Gumma (Zaphiro).

Antichromus anchietæ.

Telephonus anchietæ, Bocage, Journ. Lisb. ii. p. 344 (1870) *Pongo Andongo*; id. Orn. Angola, p. 225, pl. 4 (1881); Gadow, Cat. B. M. viii. p. 129 (1883); Swynnerton, Ibis, 1907, p. 47, 1908, p. 51 *Gazaland*; O.-Grant, Ibis, 1908, p. 291 *N.W. Tanganyika*.

Bocagia anchietæ, Shelley, B. Africa, i. No. 750 (1896).

Antichromus anchietæ, Sharpe, Handl. B. iv. p. 301 (1903).

Pomatorhynchus anchietæ, Reichen. Vög. Afr. ii. p. 553 (1903); Neave, Ibis, 1910, p. 229 *Katanga*.

Telephonus reichenowi, Neum. J. f. O. 1900, p. 120 *German East Africa*.

Antichromus reichenowi, Sharpe, Handl. B. iv. p. 301 (1903).

Pomatorhynchus reichenowi, Reichen. Vög. Afr. ii. p. 552 (1903).

Adult. Very similar to *A. minutus*, but without any trace of the black patches on the scapulars and mantle. In the adults the rufous of the back rather richer and darker in tone. The female also differs from that of *A. minutus* in the same particulars. Iris pink, bill black, feet slaty. Length 7.5 inches, wing 3.1, tail 3.2, culmen 0.70, tarsus 0.90. N'Dalla Tando, ♂, 4. 8. 08 (Ansorge).

July, 1912.

Immature. Has a number of white feathers on the black crown and the mantle and back, with a good deal of ochraceous yellow mingled with the rufous.

Anchieta's Bush-Shrike ranges from northern Angola eastwards through Katanga and Nyasaland to the coastlands of British and German East Africa, and south of the Zambesi to Gazaland.

This species was first described by Bocage from an example collected by Anchieta at Pungo Andongo in the interior of northern Angola. In his subsequent volume on the birds of Angola, Bocage gave an excellent figure, though he unfortunately identified it with the more northern *A. minutus*. It has subsequently been obtained by Mechow and Ansorge in the same region, where it is known as "Gundo," according to Anchieta, who further states that it has a sweet song only heard at night.

In Katanga Neave met with it at Kambove, where it is found about the long grass at the edge of the forest lands, while further to the north Carruthers obtained a single example between Kazongo on the Congo and Baraka on Lake Tanganyika. It is not uncommon in Nyasaland, where it was met with by Fülleborn and Stierling as well as by Whyte and Sharpe.

In East Africa it ranges from Lamu southwards along the coast and inland to Ugogo in the German Colony. Neumann believed that these birds could be distinguished from those of Angola by their lighter colour and smaller size, but I concur with Ogilvie-Grant and Reichenow in believing that this is not the case.

Recently Swynnerton has found this species in Gazaland, on the borders of Mashonaland and Portuguese East Africa, and has given us some field notes. He states: "This is a bolder bird than either *T. senegala* or *T. australis*, choosing

the tops of stakes and shrubs to perch on instead of skulking, as they do, in the undergrowth, and recognizable at once and at a distance by its conspicuous buffy-white breast and upright carriage. The stomachs of those examined contained grasshoppers, beetles and dragon-flies."

The following examples in the British Museum have been examined:—

Angola—N'Dalla Tondo (Ansorge); Belgian Congo—Kambove and Lufupa rivers (Neave), between Baraka and Kazongo (Carruthers); Nyasaland—Forthill, Zomba and Milanji (Whyte), Kikombo and Karungwesi (Sharpe); S. Rhodesia—Gazaland (Swynnerton); German East Africa—Dar-es-Saalam (Emin), Usambara (Kirk); British East Africa—Lamu (Kirk).

Genus VI. RHODOPHONEUS.

Very similar in general structure to *Tschagra*, with a moderately strong black bill; wings rounded and about one inch shorter than the tail. Primaries 4, 5 and 6 equal and longest; 3 equal to 7; 2 equal to 9, and 1 half the length of the longest. Tail slightly graduated, with broad pure white ends to the four outer pairs of feathers. Plumage above uniform pale brown, with the lower back rosy pink; some rosy pink down the centre of the chest, and the upper throat of the same colour in the males, and white in the females only.

Type.

Rhodophoneus, Heuglin, Orn. N. O.-Afr., p. 462 (1871) . . . *R. cruentus*.
This genus contains three distinguishable forms confined to east and north-east Africa.

KEY TO THE SPECIES.

- a. Upper throat red (males).
 - a¹. Sides of crop and body of a more yellowish isabel-line shade; no black gorget.
 - a². Plumage paler; crown only tinged with crimson *cruentus* ♂.
 - b². Plumage darker; back as well as crown tinged with crimson *hilgerti* ♂.

the Red Sea coast to Port Sudan, and westward into Kordofan.

The species is represented in the British Museum from Mirti in Upper Gallaland, and Tadejemulka in Danakil (Degen); Kassim River (Lovat); Ogayeh Wells in Western Kordofan (Dunn); Koomalee and Amba (Blanford), and Rairo (Jesse). These Shrikes were met with along the Red Sea coast from the Gulf of Tajura to Suakim by Heuglin, who remarks that their range is restricted to the more arid plains, where he found them in pairs or family parties both shy and restless. Their song was a pleasing shrill piping chirp, somewhat resembling that of *Lanius excubitor*. The type of the species was discovered by Hemprich and Ehrenberg at Arkiko, near Massowa. Blanford writes: "It was not rare around Annesley Bay, and was occasionally seen in Samhar and Hahab up to an elevation of about 3,000 feet, never, however, above the range of tropical flora and fauna. In December and January small families were met with, hopping along the ground, and flying one after the other from bush to bush like the Bush-Warblers; in May and June all met with were in pairs."

Butler found this Shrike common near Port Sudan and on the plains south of Suakim, and rather less so on the Erkowit plateau. He states that "its habits are something between those of *Telephonus* and *Argya*, and, like the latter, it associates in small parties."

From further inland the species has been recorded from Shendy on the White Nile (Württemberg), Kordofan and Fazogl (Kötschy), and in Shoa it was found by Antinori frequenting the mimosa-bushes which are scattered over the sandy plains at Addagalla; but it was rare there in July, in which season Dr. Ragazzi records it as abundant at Gerba.

Two eggs of this species taken by Major Dunn at Ogayeh

Wells in western Kordofan are figured in the Catalogue of Birds' Eggs of the British Museum; they are greenish-blue, sparsely spotted and blotched with rufous-brown and lavender, and measure 1.05×0.73 .

Rhodophoneus hilgerti. (Pl. 54, fig. 1.)

Pelicius cruentus hilgerti, Neum. Orn. Monatsb. 1903, p. 182 *Sheik Hussein*; Erlanger, J. f. O. 1905, p. 695 *Somaliland*; Reichen. Vög. Afr. iii. p. 833 (1905); Witherby, Ibis, 1905, p. 519 *Somaliland*.
Laniarius cruentus, Bannerman, Ibis, 1910, p. 302 *Somaliland*.

Male. Differs from *R. cruentus* only in the upper and under parts being a shade darker, the crown and mantle strongly washed with red, and in the red of the throat and chest more extensive, and generally extending in the males on to the chin. "Iris brown; bill black; legs grey" (Hawker). Total length 10.0 inches, culmen 0.9, wing 3.6, tail 4.8, tarsus 1.20. Godgul, ♂, 27. 1. 98 (Hawker).

Female. Also resembling that of *R. cruentus*, and distinguished by the pink wash of the upper parts and by the darker and more extensive cinnamon of the flanks. Wing 3.6 inches. Sheikh, 1. 2. 97 (Lort Phillips).

Hilgert's Rosy-patched Shrike is confined to Somaliland. It is very nearly allied to *R. cruentus*, which it replaces in Somaliland, and it is not known from beyond the limits of that country. In its more northern range Sir Alfred Pease met with the species in the low country often in family parties of from eight to ten individuals, and Erlanger procured specimens at Zeila, also in the Ennia and Arussi Gallalands and at Umfudu on the Juba River. Mr. Lort Phillips writes (Ibis, 1896, p. 77): "This lovely Bush-Shrike is to be met with in all open spaces on the Goolis, as it seems to avoid the thickets altogether. It is far from shy and may be seen towards sun-down in small parties, going through the most ridiculous antics. They chase each other solemnly round and round some big stone with outstretched wings and tail, or else perch on a dead bough, bob up and down to each other, and all the



1. *Rhodophoneus hilgerti*.
 2 & 3 " *cathemagmenus*.

time utter two metallic notes such as might be produced by a child's mouth-organ. During this pantomime they seem to be in a state of ecstasy, and may be approached within a few yards before they appear to be conscious of one's presence." He further writes (Ibis, 1898, p. 405): "We found this beautiful and most conspicuous Shrike plentiful from the Berbera Plains up to about 8,000 feet on Wagga Mountain." Mr. Hawker procured specimens at Jifa Medir and Godgul, and writes (Ibis, 1899, p. 68): "This Bush-Shrike was very common all through Somaliland. It makes a great variety of calls and is a good ventriloquist. It can run very fast, and if one is winged it is almost impossible to catch it among the bushes."

Erlanger found a nest with three eggs near Gobeles in Ennia Gallaland on May 26, 1900. It was well hidden in thick bush and was built of dry sticks and resembled that of a dove in its flat top and thinness. The eggs are not glossy, and in colour are pale green, spotted with earthy brown; they measure about 1.0×0.7 .

There is an extensive series of this species in the British Museum from various localities in Somaliland as follows:—

Sheikh Hussein (L. Phillips and Gillett), Upper Sheikh (Drake, Brockman), Godgul (Hawker), Logh (Delamere), Bera, Eil Dab and Upper Sheikh (Hamerton), Waghar, Dubar, Burao (Bury).

Rhodophoneus cathemagmenus. (Pl. 54, figs. 2 and 3.)

Laniarius cathemagmenus, Reichen. J. f. O. 1887, p. 63 *Loeru*.

Rhodophoneus cathemagmenus, Shelley, B. Afr. i. No. 761 (1896);

Sharpe, Handl. B. iv. p. 293 (1903).

Pelicius cathemagmenus, Reichen. Vög. Afr. ii. p. 571 (1903).

Adult male. Similar to the female of *R. hilgerti*, both in the shade of colouring of the upper parts and in the amount of the black gorget, but differing in the space between the gorget and the bill being rosy red, and the

sides of the body, thighs and under tail-coverts browner and of a less yellow shade. Iris brown, bill black, feet grey. Total length 8.1 inches, culmen 0.85, wing 3.7, tail 4.7, tarsus 1.3. British East Africa (Storey).

Adult female. Differs from the male only in having the chin and upper throat white and therefore hardly separable from the female of *R. hilgerti*. Wing 3.5, Nutu, 3. 8. 03 (Storey).

The Masai Rosy-patched Shrike inhabits German and British East Africa.

The species was discovered in its most southern known range at Loeru in the interior of German East Africa, by Fischer, who procured another specimen at Ugaia, on the eastern shores of Victoria Nyanza. It has also been obtained by Mr. Oscar Neumann at Kibaja not far from the type locality.

The British Museum has a male and three females collected by C. B. Storey in British East Africa, one of which is labelled: Nutu, October 3, 1903.

In Mr. Jackson's collection are examples from Guaso Nyiro, north of Kenia, and from Maungu between Kilimanjaro and the coast, both in British East Africa.

It appears to be a rare bird everywhere.

Genus VII. TELOPHORUS.

Type.

Telophorus, Swains. Faun. Bor. Amer. p. 481 (1831) . . . *T. zeylonus*.

Resembling *Chlorophoneus* in all essential structural characters, and in its prevailing green upper parts, but distinguished by the presence of a black gorget in both sexes and by the under wing-coverts and lining of the quills never being bright yellow.

This genus has been hitherto generally known as *Pelicius*, but a reference to the Isis for 1826 will show that Boie's type for this name is *Lanius barbarus*, Linn., so that *Pelicius* is synonymous with *Laniarius* of Vieillot. The type of *Telophorus* of Swainson is given as *Telophorus collaris* of Swainson, which is synonymous with *Lanius zeylonus* of Linnæus.

KEY TO THE SPECIES.

- a.* Forehead and front of crown red; throat red *dohertyi*.
b. Forehead and a narrow eyebrow yellow.
*a*¹. Throat red.
*a*². Abdomen green with a narrow dull crimson central streak *viridis*.
*b*². Abdomen bright yellow, green confined to the flanks . . . *quadricolor*.
*b*¹. Throat yellow, crown grey *zeylonus*.

Telophorus viridis.

Laniarius viridis, Vieill. N. D. xiii. p. 300 (1817) *Malimbe*; Gadow, Cat. B. M. viii. p. 165 (1883).

Pelicius viridis, Shelley, B. Afr. i. No. 764 (1896).

Chlorophoneus viridis, Sharpe, Handl. B. iv. p. 291 (1903).

Lanius gutturalis, Daudin, Ann. Mus. Paris, iii, 1804, p. 148, pl. 15 *Malimbe*.

Chlorophoneus gutturalis, Bocage, Journ. Lisboa xii. 1887, p. 96 *Quissange*; Reichen. Vög. Afr. ii. p. 566 (1903).

Le Piegrière Perrin, Levaill. Ois. d'Afr. vi. p. 124, pl. 286 (1808) *Malimbe*.

Adult. A wide orange forehead fading into yellow on the sides and over the eyes; crown and end half of ear-coverts, hinder half of neck, back, wings and upper tail-coverts uniform green; tail entirely black; inner lining of wings dusky grey, washed with green on most of the coverts; chin and throat crimson-shaded scarlet, enclosed by a black gorget which extends from the nostrils down the sides of the neck and widens out over the lower throat and crop; next to the black gorget, on the chest, is a marginal crescent of crimson-shaded scarlet followed by an incomplete border of chocolate-brown, which colour extends in a narrow band down the breast to the under tail-coverts, which are crimson; remainder of breast green, slightly paler and yellower than the back. Iris brown, bill and feet black. Total length 8·2 inches, culmen 0·8, wing 3·2, tail 3·3, tarsus 1·2. Landana (Lucan and Petit).

The sexes are alike; a young bird has the tail olive green, the crimson replaced by yellow, and the gorget grey.

Perrin's Bush-Shrike was first brought to Europe by M. Perrin, of Bordeaux, from Malimbe in Portuguese Congo, and described by Daudin, Le Vaillant and Vieillot. Falkenstein

obtained it at Chinchonxo and Lucan and Petit at Landana, both in the same neighbourhood. Bohndorff collected an example at Leopoldville some distance up the Congo, and Anchieta found it not rare at Quissange south of the River Quanza in Angola, and Schütt and Mechow further north at Malange and on the Camba River.

There are two examples only in the British Museum, obtained by MM. Lucan and Petit at Landana, while at Tring there are specimens collected by Ansorge at N'Dalla Tando in northern Angola and on the Bongo and Cuval rivers in Benguella, which seem to be the most southern localities yet recorded.

Telophorus quadricolor.

- Laniarius quadricolor*, Cass. Pr. Philad. Ac. 1851, p. 245 *Port Natal*; Sharpe, ed. Layard's B. S. Afr. p. 381, pl. 11 (1882); Gadow, Cat. B. M. viii. pl. 164 (1883); Stark and Selater, Bds. S. Afr. ii. p. 35 (1901); Sparrow, J. S. Afr. Orn. Union, 1905, p. 12; Swynnerton, Ibis, 1907, p. 47, 1908, p. 56 *Gazaland*; Bannerman, Ibis, 1910, p. 689 *Malindi*; W. Selater, Ibis, 1911, p. 288 *Inhambane*.
Pelicius quadricolor, Shelley, B. Afr. i. No. 763 (1896).
Chlorophoneus quadricolor, Reichen. Vög. Afr. ii. p. 566 (1903); Sharpe, Handl. B. iv. p. 391 (1903).

Laniarius olivaceus (non Shaw) Swynnerton, Ibis, 1908, p. 59 *Gazaland*.

Adult. Forehead and eyebrow yellow, with sometimes a slight wash of orange; remainder of the upper parts uniform green shading into black on the end portion of the centre two, and the whole of the other tail-feathers; wing-lining blackish inclining to white on the inner margins of the quills, and into green on the greater portion of the coverts; lores and a narrow band down the sides of the neck black joining on to a broad black collar which crosses the lower throat and crop and together incloses the crimson scarlet chin and throat; breast like the thighs deep yellow, shading into green on the flanks, and with a crimson-shaded scarlet wash on the fore-chest next to the black collar; under tail-coverts washed with red. Iris brown; bill black; feet greyish. Total length 8.0 inches, culmen 0.75, wing 3.3, tail 3.5, tarsus 1.1. Durban, ♂ (Gordge).

The female has the tail green like the back with no black; the crimson of the throat is interspersed with yellow; the black band on the sides of the head and across the crop is absent, and the under tail-coverts are ochraceous yellow. Wing 3.2. Chirinda, 25. 12. 05 (Swynnerton). Other presumed

females in the British Museum show traces of the black chest band, while one labelled "Durban, Gordge" is like the male except for the green tail. Possibly old females resemble the males.

Immature. Entire tail green like the back; some yellowish feathers on the lores; the black gorget of the adult is entirely absent; under parts greenish-yellow, more inclining to yellow on the throat; the throat and under tail-coverts becoming redder with age. "Iris brown; bill black; legs grey." Durban, ♂ juv. 4.11.75 (T. L. Ayres). In this plumage it bears a strong resemblance to *Chlorophoneus olivaceus*, from which, however, it can always be distinguished by the absence of yellow on the under wing-coverts, or quill linings.

The Four-coloured Bush-Shrike is found in south-eastern Africa from the Alexandra division of Cape Colony through Natal and East Africa as far as Malindi north of Mombasa. It keeps to the low country along the coast as a rule, seldom extending far inland. The type, which was obtained near Durban, came to Philadelphia from the Verreaux collection and was described by Cassin.

In Cape Colony this species is very rare; in fact the only record of its occurrence is that of Mr. Layard, who states that it has once occurred at Oliphants Hoek between Port Elizabeth and the Kowie.

It is, however, quite common in the neighbourhood of Durban and Pinetown, where according to Ayres they "inhabit the dense bush along the coast, never leaving it; they creep about the underwood in search of their food, and are easily obtained by those who can imitate their call, for they will immediately answer and come to the sportsman if within hearing; on perceiving their mistake they make a low chirring noise."

Among the Zulus it is known as the Ngongoni, while the Woodwards syllabize its cheerful cry as "kong-kong-koit."

Claude Grant found this Shrike not uncommon in the Inhambane district of Portuguese East Africa. "It frequents the thickets, where its cheery call of three syllables readily

betrays its presence. It is usually in pairs and I am not sure that the first two notes are not the call of the male, and the third that of the female."

Swynnerton has made some observations on this Bush-Shrike in Gazaland, where it is called by the natives Ighiyangehlangu, the expression having reference to the custom whereby at war-dances a warrior will rush out of the ranks and repeat his exploits while his comrades dance and beat time upon their shields (ihlangu).

Swynnerton syllabizes the call as "Pom puwe puwe." He trapped a female on the nest in December. "This was a rough structure of small twigs about two feet from the ground in the centre of a dense thicket beside a stream and contained two eggs, evidently the full clutch, as they were hard set. They were of a pale blue ground-colour spotted and blotched with pale brown and purplish grey." They measured 0.95×0.65 . The bird's stomach contained larvæ and a spider.

Further north specimens were collected on the Rovuma River by Joseph Thomson, and on the Pangani by Fisher, in British East Africa on the Voi River in the Teita district by Jackson, and at Mombasa (Hildebrandt) and Malindi (Fischer and Percival).

The series in the British Museum includes examples from the following localities, all already mentioned: Durban, Inhambane, Gazaland, Rovuma River, Voi River, Mombasa, Takaungu and Malindi.

Telophorus dohertyi.

- Laniarius dohertyi, Rothschild, Bull. B.O.C. xi. p. 52 (1901) *Kikuyu*;
 Ogilvie-Grant, Ibis, 1908, p. 290 *Mfumbiro volcanoes*.
 Chlorophoneus dohertyi, Hartert, Nov. Zool. 1902, p. 623, pl. 9; Reichen.
 Vög. Afr. ii. p. 567 (1903); Sharpe, Handl. B. iv., p. 391 (1903);
 Reichenow, D. Zentr. Afr. Exped. iii. p. 312 (1910).

Adult male. Above olive green, tail black; forehead to about the middle of the eye crimson; lores and a line running through the eye and ear-coverts

along the side of the neck and bending across the crop as a wide gorget, black; the chin and throat, as well as the under tail-coverts, crimson like the forehead; breast and thighs bright yellow, flanks olive green; lining of quills dusky, under wing-coverts green. "Iris brown; bill black; feet horn blue." Length about 7.5 inches, wing 3.1, tail 3.1, culmen 0.7, tarsus 1.1. Nyeri-Aberdare Forest, ♂, 7,000 feet, 26. 8. 09 (Jackson Coll.).

The sexes are alike except that in the female there are very narrow olive edges and tips to the rectrices. Wing 3.0. Nyeri-Aberdare Forest, ♀ (Jackson Coll.).

The immature bird has the upper side pale ochraceous with narrow blackish crossbars, tail olive greenish, wings olive green with pale ochraceous tips to the quills and wing-coverts; throat dull yellow; sides of the head, chest and upper breast yellow with blackish tips and bars, abdomen uniform lemon yellow, sides of the body greenish; under tail-coverts red, not bright crimson (Hartert).

Doherty's Bush-Shrike, perhaps the most beautifully coloured of all the genus, was discovered by William Doherty on the Kikuyu escarpment at 6,500 to 8,000 ft., close to Escarpment Station on the Uganda railway, not on the Nandi escarpment as originally stated. About a dozen examples were sent by this collector to the Tring Museum. It has since been obtained by Carruthers among the Mufumbiro volcanoes at 7,000 feet in November, by Grauer in the Bugoie Forest in November, and in the forest to the west of Tanganyika in June and July, the two first-named localities being in the neighbourhood of Lake Kivu on the borders of German East Africa and the Congo Free State.

Mr. Jackson's collection contains two specimens, a pair, obtained by his collector in the Nyeri-Aberdare Forest at 7,000 feet on August 26, 1905: this is not far from Mount Kenia.

All the examples hitherto obtained have been taken at considerable elevations in dense forest, to which doubtless this species is strictly confined.

Telophorus zeylonus.

- Turdus zeylonus*, Linn. S. N. i. p. 297 (1766) *Cape of Good Hope*.
Pelicius zeylonus, Reichen. Vög. Afr. ii. p. 568 (1903).
Turdus gutturalis, P. L. S. Müll. S. N. Suppl. p. 144 (1776) *Bengal* !.
Pelicius gutturalis, Shelley, B. Afr. i. No. 762 (1896); Sharpe, Handl. B. iv. p. 292 (1903); Clarke, Ibis, 1904, p. 526 *Bloemfontein*; Selater, Ibis, 1911, p. 288.
Laniarius gutturalis, W. Schl. and Stark, Bds. S. Afr. ii. p. 33, fig. 9 (1901); Shortridge, J. S. Afr. Orn. Union, 1905, p. 22 *Hanover*; L. Taylor, ibid, 1906, p. 66 *Irene*; C. Taylor, ibid. 1907, p. 20 *Ermelo*; Haagner and Ivy, ibid. 1907, p. 89 *Albany*.
Lanius bacbakiri, Shaw, Gen. Zool. vii. p. 319 (1809) *ex Levaillant*.
Laniarius bacbakiri, Gadow, Cat. B. M. viii. p. 162 (1883).
Lanius ornatus, Licht. Verz. Doubl. p. 45 (1823) *Cape of Good Hope*.
Telophorus collaris, Swains. Faun. Bor. Amer. p. 481 (1831).
Le Bacbakiri, Levaill. Ois. d'Afr. ii. p. 65, pl. 67 (1799).

Adult male and female. Forehead, crown and hinder half of neck lead-grey, margined from the nostril to above the eye with a bright yellow eyebrow; remainder of upper parts uniform green when the wings and tail are closed; the pair of green centre tail-feathers are slightly darker than the back and have many very obscure dusky bars; remainder of tail black with yellow ends increasing in size towards the outer feathers and generally with a wash of green on the outer edges of the yellow spot; wing-lining and under wing-coverts dusky grey with some yellow along the bend of the wing; under parts bright yellow, with a tinge of olive on the flanks and thighs; a black patch covering the lores extends as a narrow band under the eye and down the sides of the throat and widens out over the whole of the lower throat and crop into a gorget. Iris brown; bill black; legs dark slate. Total length 9·0 inches, culmen 1·0, wing 3·8, tail 3·7, tarsus 1·4. Mossel Bay, ♂, 11. 4. 73 (F. Oates).

Immature. Differs only in the colouring of the head, neck and chest; no eyebrow; forehead, crown and hinder half of neck green; sides of head grey; no black gorget; cheeks white like the chin and upper half of the throat, which gradually shade into olive-tinted yellow on the lower throat, crop, and sides of fore-chest. Iris brown; bill dark horn-colour fading into flesh-colour on the basal half of the lower mandible; feet slate grey. Wing 3·7. Wellington, 26. 1. 74 (Shelley).

The Bacbakiri Shrike ranges over the greater part of South Africa from Benguella to Cape Town, and thence east to Durban and Wakkerstroom in the south-east Transvaal.

It was first noticed by Brisson, who in 1760 gave a good description of it, and states that it was sent from the Cape by the Abbé de la Caille (a well-known astronomer, who measured the first arc of meridian south of the equator) to M. de Reaumur. Linnæus, wrongly led by Edwards, who also described the bird and stated that it came from Ceylon, named it *Turdus zeylonus*.

This species is exceedingly common throughout the whole of Cape Colony, especially in the western and central districts. During my short visit to South Africa, I found it most abundant around Cape Town and also procured specimens at Wellington, Ceres and Port Elizabeth. In Natal it is distinctly rare at Durban, though I have an example collected for me by Gordge; further up country from Colenso to Newcastle it is quite common and was met with by Messrs. Butler, Feilden and Reid.

Clarke found it common at Bloemfontein and Symonds at Kroonstad, while in the Transvaal it is rare in Wakkerstroom (Grant), Ermelo (C. Taylor), and at Irene (L. Taylor), but common at Pretoria (Distant and L. Taylor).

In Damaraland according to Chapman and Andersson it is more common in the south and becomes rare northwards, while in Angola it was met with on the Rio Coroca in south Mossamedes by Anchieta and Van der Kellen, and Monteiro collected a single example at Cuio Bay just south of Benguella. This is the most northern locality yet recorded.

Messrs. Selater and Stark give the following account of its habits:—

The Bacbakiri is an exceedingly conspicuous bird, both from its loud and unmistakable note and also from its beautiful plumage of yellow and green with a black chest-band. The male and female are seldom found far apart, and perched on neighbouring branches, often of high trees, utter their loud

call and answer, the head being thrown up, the beak pointed skywards and the mouth wide open. The note of the male varies somewhat, but can be best expressed as follows: "bac-ba-kiri, bac-ba-kiri," and the female follows with—"cow-it, cow-it." Away from human habitations these birds appear to be shy and retiring, frequenting thick bush, and being found generally near the ground, but in the gardens and suburban districts round Cape Town, they are exceedingly conspicuous and noticeable.

The food consists of worms, caterpillars and insects, which they obtain on or near the ground; their powers of flight are not very great, owing to the comparative shortness of the wings, but they run very well and quickly.

The nest is generally placed in a low bush and is made of grass, lined usually with down, sometimes only with finer grass; the eggs, four to five in number, are bright verditer blue, spotted chiefly at the thicker end with rusty red. They measure about 1.0×0.78 . Both male and female take part in incubation.

The British Museum contains the examples from the following localities:—

Cape Colony—Cape Town (Butler, Shelley), Ceres and Wellington (Shelley), Mossel Bay (Oates), Elands Post (Atmore), Deelfontein (Grant and Seimund), Klipfontein, Port Nolloth, Plettenberg Bay (Grant); *Natal*—Durban (Gordge), Newcastle (Butler); *Orange River Colony*—Kroonstad (Symonds); *Transvaal*—Potchefstroom (Ayres), Wakkerstroom (Grant); *German S.W. Africa*—Walfisch Bay and Hykamkop (Andersson); *Angola*—Cuio Bay (Monteiro).

Genus VIII. NEOLESTES.

*Type.*Neolestes, Cab., J. f. O. 1875, p. 237 *N. torquatus*.

This genus comes near *Chlorophoneus* and *Telophorus*, but the bill is short and slender and the culmen and gonyes are gently down curved throughout; the nostrils are semilunar in shape, have a well developed operculum and are quite exposed; rectal-bristles large; wing rounded, the first primary a little more than half the second, the fourth and sixth the longest; tail slightly rounded and about equal to the wing.

The genus contains only a single species.

Neolestes torquatus.

Neolestes torquatus, Cab. J. f. O. 1875, p. 237, pl. i fig. 1, *Chinchonxo*, Gadow, Cat. B.M. viii. p. 171 (1883); Reichen. Vög. Afr. ii. p. 556 (1903); Sharpe, Handl. B. iv. p. 229 (1903).

Pellicinius torquatus, Shelley, B. Afr. i. No. 765 (1896).

Adult male. General colour above yellowish-green, the wing and tail-feathers dusky, washed and edged with yellowish-green; forehead, crown and nape slaty grey, bordered on either side by a black band running from the base of the bill through the eye to above the ear-coverts and thence passing downward and forming a broad black gorget with a steel blue gloss covering the whole of the crop; ear-coverts, cheeks, throat and rest of under parts white, tinged with buffy and becoming olivaceous on the flanks and thighs; under wing-coverts buffy-yellowish becoming brighter yellow on the front portion and on the bend of the wing, which is quite bright yellow. Iris dark brown, bill greenish black, legs dark olive green. Length 6·5 inches, wing 2·9, tail 2·6, culmen 0·45, tarsus 0·7. N'Dalla Tando, ♂, 15. 9. 08 (Ansorge).

Female. Resembles the male, but is smaller. Wing 2·8, tail 2·5. N'Dalla Tando, ♀ (Ansorge).

Immature. Has the head and neck green like the back; the feathers of the back and the wing-coverts are tipped with rufous and the black gorget is duller black (Reichenow).

This little Shrike is known from northern Angola, the lower Congo region and from the Lake Kivu district of Central Africa.

It was first discovered by Falkenstein at Chinchonxo in Portuguese Congo and was subsequently collected by Lucan

and Petit at Landana in the same region. Bohndorff found it at Leopoldville on the Congo, and Reichenow states that it was obtained at Lake Kivu by Kandt.

The British Museum contains one example from Landana and a set of three males and three females collected by Ansorge at N'Dalla Tando in northern Angola. Nothing is recorded about its habits.

Genus IX. MALACONOTUS.

Bill stout and powerful, notched and hooked, at least 0.4 inch deep; nostrils rounded at the front end of a groove and not concealed by the frontal bristles; a few rectal-bristles; wings short and rounded, the outer primary at least two-thirds the length of the second; fourth and fifth the longest; wings and tail approximately equal; tarsus with transverse scutes in front, and two long plates posteriorly. Plumage very constant, with green backs, grey hoods and generally yellow or orange under parts, the quills and coverts with pale yellow tips; sexes alike.

Type.

Malaconotus, Swainson, Zool. Journ. iii. p. 163 (1827) *M. poliocephalus*.

Archolestes, Cab. Mus. Hein. i. p. 71 (1850) *M. poliocephalus*.

This genus is confined to tropical and south Africa; ten forms are here recognized, many of which are hardly more than subspecifically distinct from one another.

KEY TO THE SPECIES.

- a.* Under-parts yellow; no grey on the throat.
 - a*¹. Tail with a subterminal black bar; throat and chest washed with orange red.
 - a*². The grey hood extends down over the upper back *cruentus*.
 - b*². The grey hood not extending on to the upper back.
 - a*³. Back green with a shade of yellowish; under tail-coverts washed bright yellow or orange . *gabonensis*.
 - b*³. Back clearer green without yellow; under-tail coverts paler yellow *adolphi-friederici*.
 - b*¹. Tail without a subterminal black bar.
 - c*². Entire upper half of the head uniform grey; wing-feathers subterminally blackish next the pale yellow tips *lagdeni*.

- d*². With white on the sides of the head; wing feathers with no subterminal dark portion.
- c*³. The white on the sides of the head extending round the eye and forming a patch behind the ear-coverts *monteiri*.
- d*³. The white on the sides of the head confined to a loreal band in front of the eye.
- a*⁴. With no trace of chestnut on the crop; wing 5·0 *catharoxanthus*.
- b*⁴. With a trace of chestnut on the crop; wing 4·8 *poliocephalus*.
- c*⁴. With the crop faintly but distinctly washed with chestnut; wing 4·5 *hypopyrrhus*.
- d*⁴. With the crop chestnut, distinctly marked off from the yellow throat; wing 4·2 *approximans*.
- b*. Under parts olive like the back; throat grey *gladiator*.

Malaconotus poliocephalus.

- Lanius poliocephalus*, Licht. Verz. Doubl. p. 45 (1823) *Senegambia*.
- Laniarius poliocephalus*, Gadow, Cat. B. M. viii. p. 156 (1883); Ogilvie-Grant, Ibis. 1908, p. 288.
- Malaconotus poliocephalus*, Shelley, B. Afr. i. No. 777 (1896); Sharpe, Handl. B. iv. p. 289 (1903).
- Malaconotus poliocephalus poliocephalus*, Neum. J. f. O. 1906, p. 156.
- Lanius olivaceus* (non Shaw), Vieill. N. Dict. xxvi. p. 135 (1818) *Senegal*.
- Malaconotus olivaceus*, Swains. B. W. Afr. i. p. 237, pl. 22; Reichen. Vög. Afr. ii. p. 601 (1903).
- Malaconotus blanchoti*, Steph. Gen. Zool. xiii. p. 161 (1826) *Senegal*.
- Vanga ictera*, Cuv. R. An. p. 352 (1829) *Senegal*.
- Laniarius icterus*, Sharpe, P.Z.S. 1870, p. 148, pl. 13, fig. 2.
- Laniarius perspicillatus*, Reichen. J. f. O. 1894, p. 36 *Buea, Camaroon*.
- La Piegriche Blanchot*, Levaill. Ois. d'Afr. vi., p. 122, pl. 285 (1808).

Subspecies Malaconotus catharoxanthus.

- Malaconotus catharoxanthus*, Neumann, J. f. O. 1899, p. 391 *Bongo, Bahr el Ghazal Prov.*; Sharpe, Handl. B. iv. p. 290 (1903).
- Malaconotus monteiri catharoxanthus*, Reichen. Vög. Afr. ii. p. 601 (1903).
- Laniarius poliocephalus catharoxanthus*, Ogilvie-Grant, Ibis, 1904, p. 266 *Hiressa, Abyssinia*.
- Malaconotus poliocephalus*, Butler, Ibis, 1905, p. 329 *Gallabat, Sudan*.

Laniarius catharoxanthus, Butler, Ibis, 1908, p. 226, 1909, p. 81 *Bahr el Ghazal*.

Malaconotus poliocephalus catharoxanthus, Zedlitz, J. f. O. 1910, p. 801 *Tacazze River, N. Abyssinia*.

Adult. Sides and upper half of the head and the hinder half of the neck grey, with a patch of white from the eye to the nostril; back, wings and tail yellowish green; upper tail-coverts with yellowish terminal margins; tail with pale yellow ends to the feathers, very narrow on the centre ones and rather broader towards the outer ones; wing with pale yellow ends to most of the feathers; end portion of the pale outer webs of some of the primaries yellow; under wing-coverts, inner margins and tips of quills pale yellow, remainder of under side of quills blackish; under parts uniform sulphur yellow or with an obsolete shade of rufous near the crop. Iris orange or yellow; bill black; feet grey. Total length 11.5 inches, culmen 1.3, wing 4.9, tail 4.9, tarsus 1.5. Gambia (Moloney).

M. p. catharoxanthus. Only distinguishable by its slightly paler under parts, which show no traces of the rufous shading on the crop and breast. Size about the same, wing 5.0, tail 4.7. Hiressa, 19. 6. 02 (Degen).

The West African Grey-headed Bush-Shrike is found throughout the West African sub-region from Senegal to northern Angola, and eastwards to the Niam Niam country and the region of Tanganyika.

The type obtained by Delbrück was brought from Senegal, whence Le Vaillant and Swainson also received it. Sir A. Moloney gave me a specimen from the Gambia, and there is one in the British Museum from the Casamanse River. It occurs in Liberia, the Gold Coast Colony, Togoland and Camaroon, and also in Angola, where Anson obtained an example on January 30, 1909, at Malange and Anchieta at Caconda, both undoubtedly this species, and not *M. monteiri*. Away from the coastlands it occurs in northern Nigeria, whence there is in the museum an example from Illorin collected by Churchill Bryant, and two from between the Benue and Lake Chad, collected by Alexander. Further east it was obtained by Bohndorff at Semio in the Niam Niam country and at 6,000 ft. on Mount Elgon, by F. J. Jackson, north-west

of Lake Tanganyika by Carruthers, and at Karungwisi, near Lake Mweru, by Sir A. Sharpe.

In north-east Africa the Grey-headed Bush-Shrike has been separated by Neumann as a sub-species, and is distinguishable by the absence of the orange wash on the crop and breast. Neumann's type was obtained by Heuglin at Bongó in what is now the Bahr el Ghazal Province of the Sudan. Butler collected one specimen only at Gallabat on the Sudan-Abyssinian frontier, and others in the Bahr el Ghazal, Degen, one at Hiressa in Abyssinia, at an elevation of 8,000 ft., on June 16, and Zedlitz, a single example on the Tacazze River in northern Abyssinia.

Nothing has been recorded on the habits or nidification of the species.

Malaconotus hypopyrrhus.

Malaconotus hypopyrrhus, Hartl. Verz. Brem. Samml. p. 61 (1844)
"Africa."

Malaconotus poliocephalus hypopyrrhus, Neum. J. f. O. 1906, p. 156.

Laniarius hypopyrrhus, Ogilvie-Grant, Ibis, 1908, p. 288.

Laniarius starki, W. L. Slater, Ibis, 1901, p. 153 *S. Africa*; Slater and Stark, Bds. S. Afr. ii. p. 41 (1901); Shortridge, Ibis, 1904, p. 183 *Pondoland*; Stoehr and Slater, J. S. Afr. Orn. Union, 1906, p. 95 *Zambesi*; Taylor, *ibid.* 1907, p. 21 *Swaziland*; Swynnerton, Ibis, 1907, p. 49, 1908, p. 60 *Gazaland*.

Malaconotus starki, Sharpe, Handl. B. iv. p. 289 (1903).

Malaconotus olivaceus starki, Reichen. Vög. Afr. ii. p. 603 (1903); Slater, Ibis, 1911, p. 290 *S. E. Africa*.

Malaconotus poliocephalus, Gadow, Cat. B. M. viii. p. 156 (1883) *in part*.

Malaconotus blanchoti (non Steph.), Shelley, B. Afr. i. No. 778 (1896).

Adult. Similar to *M. poliocephalus*, from which it differs in having a well-marked rufous shade on the lower throat and front of the chest; and from *M. approximans*, in the region of the crop being paler, of a cinnamon rather than a chestnut shade. "Iris yellow; bill black; legs grey"; wing 4.5 inches. Durban, ♂ (T. L. Ayres). The young bird has a brown bill.

The Southern Grey-headed Bush-Shrike ranges along the east and south-east coast of Africa, from about the Pangani River in German East Africa to Pondoland in Eastern Cape

Colony; it is also met with in the interior to Nyasaland, the eastern half of Rhodesia, and the bush districts of the Transvaal.

In Cape Colony it is only found in the eastern districts; Shortridge obtained examples near Port St. John's, but it was not common there. In Natal I only obtained one specimen while I was at Durban, and never having seen it alive I considered it rare, until one of my collectors, Mr. Gordge, sent me nine specimens from that locality. In the bush-veld of the Transvaal it was noticed by Ayres on the Lehtaba River, by Taylor in Swaziland, and on the Umvuli River in Mashonaland by Ayres, when in company with my late friend, Mr. Jameson.

Swynnerton, who found this Shrike fairly common in Gazaland and the eastern border districts of Rhodesia, writes as follows: "This bird is a great eater of *Neptunides polychrous*, a Cetoniid beetle which is extremely destructive to our pineapples, and nearly every stomach which I have examined has contained its remains. Care is necessary in handling a captured bird, as they bite fiercely, inflicting nasty cuts. One which I kept in captivity for some time fed freely on locusts, grasshoppers and their larvæ, and would utter when alarmed a harsh cry, 'Chichy-chichichy.'

"On November 12 I was shown a nest of this bird placed on the terminal twigs of a projecting branch of a tree (*Bridelia* sp.) about 20 feet from the ground in a wooded kloof. It was a broad flat structure about 9 inches in diameter, of dry twigs resembling a dove's nest. It was not lined and very loosely put together. It was in a quite inaccessible position, and the eggs, four in number, were only obtained with the help of a butterfly net at the end of a 20-foot pole. They were large and rounded with large pale brown and grey blotches, chiefly about the larger end. They average 1.1×0.85 .

The stomach of the female contained the remnants of a young bird."

Claude Grant observed this Bush-Shrike in the eastern Transvaal and in various localities in Portuguese East Africa south of the Zambesi. He found that it frequented thick bush and was more often heard than seen. The note he described as unmistakable, being a soft sort of cluck followed by a long loud whistle; while emitting this, the bird throws back his head and opens his beak.

North of the Zambesi this species has been collected at Zomba and several other localities in Nyasaland by Whyte, Manning, Sharpe and Johnston. In Quilimane, according to Dr. Stuhlmann, it is called "Kubuirro" and "Morio." An example in the British Museum from the Rovuma River collected by Thomson seems to be the South African form rather than that of East Africa, while two others from Dar-es-Salaam and Ugogo in German East Africa, collected by Kirk, are intermediate.

This Shrike generally keeps to thick bush and remains well hidden, but occasionally when breeding it frequents open glades and takes up its station on a prominent perch, when it makes sudden darts at insects, taking them sometimes in the air, sometimes from leaves or twigs, or sometimes from the ground. It preys chiefly on insects, but also catches mice, small birds, and even snakes. Its call note is a mournful whistle preceded by a softer fowl-like chuck. This has got for it among the South African Dutch the trivial name of "Spook Vogel," or Ghost Bird.

The collection of the British Museum contains the following examples:—

Natal—Durban (Gordge, Ayres, Alexander); *Zululand*—Eshowe (Woodward); *Transvaal*—Lehtaba River (Ayres); *S. Rhodesia*—Mazoe (Darling), Chiquaqua (Sowerby); *Portuguese*

E. Africa—Zomba, Chicowa on the Zambesi (Alexander), Chiringoma district (Cavendish), Coguno and Tete (C. Grant), Rovuma River (Thomson); various localities in Nyasaland (Sharpe, Johnston, Whyte and Manning).

Malaconotus approximans.

Archolestes approximans, Cab. in Decken, Reis. iii. p. 27 (1869) *Dalaon River, Usambara*.

Malaconotus approximans, Shelley, B. Afr. i. No. 779 (1896).

Malaconotus poliocephalus approximans, Neum. J. f. O. 1906, p. 156.

Laniarius approximans, Ogilvie-Grant, Ibis, 1908, p. 287; Bannerman, Ibis, 1910, p. 302 *Waghar*.

Malaconotus olivaceus hypopyrrhus (non Hartl.), Reichen. Vög. Afr. ii. p. 602 (1903); id. Atlas, pl. 10, fig. 2; id. J. f. O. 1903, p. 559; Erlanger *t. c.* p. 699 *Shoa and S. Somaliland*.

Laniarius blanchoti, Ogilvie-Grant, Ibis, 1904, p. 266 *S. Abyssinia*.

Malaconotus poliocephalus schoanus, Neumann, Orn. Monatsb. 1903, p. 89 *Shoa*; id. J. f. O. 1905, p. 225.

Adults. Similar to *M. poliocephalus*, from which it is distinguished only by the rich chestnut shade across the lower throat and crop; this contrasts sharply with the remainder of the throat, which is sulphur yellow. "Iris yellow; bill horny black; feet grey." Total length 9 inches, culmen 1.25, wing 4.3, tail 4.0, tarsus 1.35. Mombasa, ♀, 22. 6. 77. (Fischer).

Examples from Shoa average rather larger. Wing 4.8, Marko, ♂, 12. 12. 00. (Pease).

The East African Grey-headed Bush-Shrike replaces the previous species from about the line of the Pangani River in German East Africa, northwards to Shoa and southern Abyssinia.

The type was obtained by Baron von der Decken on the Dalaon stream, a tributary of the Umbe River, which flows close to the Anglo-German boundary of German and British East Africa. In the same neighbourhood Sir John Kirk collected specimens for me in the Usambara country and also from Lamu, further north. Dr. Hildebrandt found it generally distributed throughout the Ukamba country, and Dr. Fischer

collected specimens at Pangani, Kipini, Mombasa, and Lamu Island, where he informs us that natives call it "Mgua." It is not very abundant here, but often in the morning its long melancholy cry is to be heard in the thick acacia scrub. From further inland there are specimens in Mr. Jackson's collection from Kamassia in the Rift Valley and Massabit, a volcano, 150 miles north of Kenia.

Erlanger obtained this Bush-Shrike at Kismayu, in South Somaliland, as well as in several localities in Shoa and North Somaliland, where it has also been met with by Pease, Degen, Neumann and Zaphiro. Erlanger states that it is a cautious and shy bird, seldom seen, and generally keeping to thick bushes, and that it has a sweet and loud-resounding call.

Neumann has separated the birds from Shoa and south Abyssinia from those of East Africa under the name of "*schoanus*," but the difference, which is only that of size, is very slight, and as has been shown by Reichenow, there is a great deal of individual variation in this respect.

I have examined the following examples of this species in the British Museum: *German East Africa*—Pangani River (Kirk); *British East Africa*—Mombasa (Buxton and Fischer), Lamu (Kirk and Jackson); *Abyssinia*—Walda, Marko and Alaga (Pease), Billen and Lake Zwai (Degen); *Somaliland*—Waghar (Zaphiro).

Malaconotus monteiri.

Laniarius monteiri, Sharpe, P.Z.S. 1870, p. 148, pl. 13, fig. 1 *Rio Dande, Loanda.*

Malaconotus monteiri, Shelley, B. Afr. i. No. 776 (1896); Reichen. Vög. Afr. ii. p. 600 (1903); Sharpe, Handl. B. iv. p. 290 (1903).

Laniarius monteiri, Ogilvie-Grant, Ibis, 1908, p. 288, *in part.*

Adult. Very similar to *M. poliocephalus*, from which it differs only in the greater amount of white on the sides of the head and neck, the white extending back from the nostrils over and under the eye to the ear-coverts.

which have the ends white, and there is sometimes a patch of white on the sides of the neck behind the lower half of the ear-coverts; the grey of the head is also of a darker shade of slate. Iris brownish-grey or greenish ochre, bill black, feet slaty blue (Ansorge). Length about 10 inches, wing 4.25, tail 4.2, culmen 1.0, tarsus 1.4. Rio Dande, type, 28. 4. 69 (Sala).

Monteiro's Grey-headed Bush-Shrike is a native of Angola.

The type was obtained by Herr Sala on the Rio Dande to the north of St. Paul de Loanda on April 28, 1869, and is now in the British Museum.

Ansorge has recently obtained two examples, a male at N'Dalla Tando, and a female at Dondo, both inland from St. Paul de Loanda in northern Angola. These two agree very well with the hitherto unique type in the extension of the white above and below the eye. At the same time Dr. Ansorge obtained at Malange, quite in the same neighbourhood, an undoubted example of the true *M. poliocephalus*. It therefore seems probable that *M. monteiri* must be considered a true specific form, and not, as has been suggested by Reichenow and Ogilvie-Grant, an individual aberration.

Malaconotus lagdeni.

Laniarius lagdeni, Sharpe, P.Z.S. 1884, p. 54, pl. 5 *Ashantee*; Ogilvie-Grant, Ibis, 1908, p. 289; id. Trans. Zool. Soc. xix. p. 340 (1910) *Ruvenzori*.

Malaconotus lagdeni, Shelley, B. Afr. i. No. 775 (1896); Reichen. Vög. Afr. ii. p. 600 (1903); Sharpe, Handl. B. iv. p. 290 (1903); Reichen. Deutsch. Zentr. Afr. Exped. iii. p. 314 (1910).

Adult. Entire upper half of the head and hinder half of neck deep grey; back, tail and closed wings mostly green; upper tail-coverts and tail-feathers with terminal yellow margins, broadest on the outer tail-feathers; wing-coverts and inner secondaries with rather broad pale yellow ends, and a black subterminal portion of these feathers showing; under wing-coverts and inner edges of the quills yellow; under parts bright yellow washed with orange on the throat. Bill black; feet grey. Total length 10.5 inches, culmen 1.2, wing 4.6, tail 4.5, tarsus 1.35. *Ashantee*, type (Lagden).

The type, a single specimen, probably a male, was procured by Sir Godfrey Lagden in 1883 in Ashantee, and until quite recently remained unique. On March 29, 1906, a second example was obtained by Mr. Gerald Legge in the Mubuku Valley on the western slope of Ruwenzori at an altitude of 9,000 feet. This is a female and is slightly smaller than the type. The wing measures 4·4, and the throat is of a somewhat less brilliant orange yellow.

Several additional specimens have recently been procured by Herr R. Grauer on the higher slopes of the Mufumbiro volcanoes lying to the north of Lake Kivu. These are now in the Tring and Berlin Museums.

Malaconotus cruentus.

Vanga cruenta, Less. Cent. Zool. 1830, p. 198, pl. 65 *Cape Coast*.

Malaconotus cruentus, Reichen. Vög. Afr. ii. p. 604 (1903).

Laniarius poliochlamys, Gadow, Cat. B. M. viii. p. 155, pl. 3 (1883)
Fantee.

Malaconotus poliochlamys, Shelley, B. Afr. i. No. 773 (1896); Sharpe, Handl. B. iv. p. 289 (1903); Kemp, Ibis, 1905, p. 234 *Bo*.

Laniarius lessoni, Salvad. Ibis, 1884, p. 323.

Adult. Cheeks, ear-coverts, crown, hinder half of neck and the upper back lead-grey, fading into white on the forehead, lores and round the eyes; remainder of upper parts mostly green; secondaries and tail-feathers with fairly broad yellow ends and broader subterminal black bars; shafts of the tail-feathers with the greater portion blackish above and white beneath; primaries with the obsolete yellow ends confined to their outer margins; outer edge of the wing black, including some of the greater-coverts, the primary-coverts and the two outer primaries; inner webs of all the quills black with broadish pale yellow margins; under wing-coverts pale yellow, mottled with orange near the bend of the wing; under parts yellow, washed with orange-shaded vermillion on the throat and chest, and often there is an orange mark down the centre of the abdomen and on the under tail-coverts. "Iris grey; bill black, feet lead-grey" (Baumann). Total length 9·6 inches, culmen 1·2, wing 4·2 to 4·5, tail 4·4, tarsus 1·3. *Fantee* (Aubin).

Lesson's Fiery-breasted Bush-Shrike is found on the west coast from Sierra Leone to Togoland.

The type of Lesson's *Vanga cruenta* came from "Cape

Coast." As the same specific name had been previously given by Hemprich and Ehrenberg to another Bush-Shrike, Count Salvadori proposed in 1884 to call it after Lesson, not remarking that in the previous year it was to this species that Dr. Gadow had given the name *Laniarius poliochlamys*. But as Hemprich and Ehrenberg's *Lanius cruentus* is now referred to the genus *Rhodophoneus* there is no reason to reject Lesson's original name.

Kemp obtained this species at Bo, in Sierra Leone, and Demery on the Sulymah River in the same neighbourhood (Büttikofer, Notes Leyd. Mus., xiv., p. 23), while Ussher stated that it was not common near Cape Coast Castle, but more abundant in the interior in the forests of Fantee. In the neighbouring German Colony of Togoland it was procured by Baumann.

The British Museum contains examples of this species from Bo in Sierra Leone (Kemp), and from Fantee in the Gold Coast Colony (Ussher and Aubinn).

***Malaconotus gabonensis*.**

Malaconotus gabonensis, Shelley, Bull. B. O. C. iii. p. 43 (1894) *Gaboon* ; Sharpe Handl. B. iv. p. 290 (1903) ; id. Ibis, 1908, p. 329 *Camaroon* ; Reichen. Mittl. Zool. Mus. Berlin v. p. 83 (1910) *Rio Benito*.

Laniarius hypopyrrhus (non Hartl.), Gadow, Cat. B. M. viii. p. 155 (1883).

Malaconotus hæmatothorax, Neum. J. f. O. 1899, p. 390 *Camaroon*.

Malaconotus lessoni (non Salvad.), Reichen. Vög. Afr. ii. pp. 604, 725 (1903).

? *Malaconotus melinoides*, Reichen. J. f. O. 1907, p. 470 *Bangwa*, N. *Camaroon*.

Very similar in plumage to *M. cruentus*, differing only in the grey of the upper parts not extending beyond the neck, the entire mantle being green like the remainder of the back: the primary coverts are green, not black; under parts in adult birds are more strongly washed with vermilion. Wing 4·3 inches. Efulen, ♂, 25. 6. 03 (Bates).

The Gaboon Fiery-breasted Bush-Shrike takes the place of the previous species from Camaroon to Gaboon. It appears to have been first met with by a collector of the Verreaux

(Rev. Mag. Zool. 1855, p. 419). They speak of it as a magnificent species resident in Gaboon, only found in ravines where the bush is very thick, and never far from water. It feeds on Coleoptera and also on the large ants so abundant in that country, and has a loud cry heard morning and evening. An example from Verreaux's collection is in the British Museum. Du Chaillu procured this species also in Gaboon at Rembo, Moonda River, and in the Ogowe district. In Camaroon it has been met with in various localities by Preuss, Zenker, and other German collectors, and there is a good series in the British Museum from Efulen and the River Ja, collected by G. L. Bates.

Reichenow names a bird from northern Camaroon *M. melinoides*, distinguishing it by its orange-yellow instead of orange or scarlet-red breast and throat.

Malaconotus adolfi-friederici.

Malaconotus adolfi-friederici, Reichen. Orn. Monatsb. 1908, p. 191 *Beni*; id. Deutsch. Zentr. Afr. Exped. iii, p. 314, pl. vii.

Resembling *M. gabonensis*, but with the upper parts a clearer green and less yellowish; the under tail-coverts are paler yellow; the yellow at the tips of the secondaries and tail-feathers is paler; as are also the under wing-coverts and the inner edges of the primaries; the bill is smaller (Reichenow).

One male example of this species which I have not seen, but which seems hardly separable from *M. gabonensis*, was taken in the Congo Forest north-west of Beni on the Semliki River in January, 1908, by the expedition of the Duke of Mecklenburg.

Malaconotus gladiator.

Laniarius gladiator, Reichen. J. f. O. 1892, p. 441 *Buca*.

Malaconotus gladiator, Shelley, B. Afr. i. No. 780 (1896); Reichen. Vög. Afr. ii. p. 600, pl. x. fig. 1 (1903); Sharpe, Handl. B. iv. p. 290 (1903).

Head, nape, chin and upper throat grey, the throat washed with olive;

the rest of the body, including the wing-coverts and tail, olive-green; wing quills black with olive green outer and yellow inner edges. Iris grey, bill black, legs leaden grey. Length 10·6 inches, culmen 1·3, wing 4·7, tail 4·7, tarsus 1·4 (Reichenow).

Preuss's Grey-headed Bush-Shrike is only known to me by the description of the type, which was discovered by Preuss at Buea in Camaroon at an elevation of between 3,000 and 4,000 feet above the sea.

Genus X. CHLOROPHONEUS.

Bill moderate, not specially stout, never 0·4 inch deep; in other structural characters resembling *Malaconotus*; plumage green or green and slaty above, generally yellow or orange below, always with yellow under wing-coverts and axillaries, and a yellow lining to the quills and without a black gorget; sexes differing; the males always with a black band on the side of the head.

Type.

Chlorophoneus, Cat. Mus. Hein. i. p. 70 (1850) . . . *C. rubiginosus*.

Cosmophoneus, Neumann, J. f. O. 1899, p. 392 . . . *C. multicolor*.

This genus, containing thirteen distinguishable species and subspecies, is confined to tropical and south Africa.

KEY TO THE SPECIES.

- a*. A black frontal band extending back through the eye to the ear-coverts.
 - a*¹. Under parts crimson red.
 - a*². Crown white, becoming grey on the nape and mantle.
 - a*³. Crimson of the under parts extending all over the abdomen *batesi* ♂.
 - b*³. Crimson fading into yellowish on the abdomen *multicolor* ♂.
 - b*². No white on the crown *preussi*.
 - b*¹. Under parts yellow or orange, no crimson or black.
 - c*². Forepart of crown and eyebrow white, tail black *melamprosopus* ♂.
 - d*². No white on the crown, tail green.
 - c*³. Breast yellow, becoming more greenish on the flanks *nigrifrons*.
 - d*³. Breast rich orange contrasting with the greenish flanks *manningi*.

- c*¹. Throat and chest black, contrasting with the orange belly *nigrithorax*.
- b*. Black band on the sides of the head, not extending across the forehead.
- d*¹. Crown and nape slaty-grey.
- e*². Forehead and eyebrow bright yellow.
- e*³. Ear-coverts black *sulfureopectus* ♂.
- f*³. Ear-coverts grey or black fading into grey . . . *similis* ♂.
- f*². Forehead slaty-grey like the crown.
- g*³. With greenish-yellow tips to the outer rectrices.
- a*⁴. A white eyebrow *rubiginosus* ♂.
- b*⁴. No white eyebrow *bertrandi* ♂.
- h*³. With dark yellow tips to the outer rectrices . . *rudolphi* ♂.
- e*¹. Crown, nape and forehead green like the back, lores and eyebrow yellow *olivaceus* ♂.
- c*. No black band on the sides of the head [♀ s.].
- f*¹. Throat and chest crimson { *multicolor* ♀.
batesi ♀.
- g*¹. Underparts yellow, no crimson.
- g*². Crown slaty-grey.
- i*³. Larger, a little white about the lores *melamporosopus* ♀.
- j*³. Smaller, lores and eyebrow yellow { *sulfureopectus* ♀.
similis ♀.
- h*². Crown green like the back { *olivaceus* ♀.
rubiginosus ♀.
- h*¹. Throat and chest cinnamon-brown, no yellow . . { *bertrandi* ♀.
rudolphi ♀.

Chlorophoneus multicolor.

Laniarius multicolor, Gray, Gen. B. i. p. 299, pl. 72 (1849); Gadow, Cat. B. M. viii. p. 158 (1883).

Malaconotus multicolor, Shelley, B. Afr. i. No. 771 (1896).

Chlorophoneus multicolor, Reichen. Vög. Afr. ii. p. 565 (1903); Sharpe, Handl. B. iv. p. 290 (1903); Kemp, Ibis, 1905, p. 234 *Bo*.

? *Cosmophoneus liberianus*, Neumann, J. f. O. 1899, p. 393 *Liberia*.

Adult male. A broad black band, covering the forehead and sides of head and extending half way down the sides of the neck, is margined above with white, which extends more or less over the front half of the crown and gradually shades into bluish-grey on the hinder half of crown, back of neck and upper back; remainder of back and most of the tail and closed wings green; tail-coverts with some obscure yellowish terminal margins; tail shading

more or less into black towards the pale orange-red ends; the shafts of the feathers on the dark portion are black above and mostly white beneath; wings, with some pale yellow ends to the quills, largest on the inner secondaries; quills beneath blackish, with their inner margins and the ends of some of them sulphur-yellow; under wing-coverts brighter and darker yellow; under parts mostly deep vermillion with the bases of the feathers orange, which colour predominates on the sides of the body, abdomen, thighs and under tail-coverts. "Iris pale blue or violet; bill black; feet lead-grey" (Reichenow). Total length 9 inches, culmen 0.75, wing 4.2, tail 3.9, tarsus 1.05. Gold Coast (Swanzy).

Adult female. Differs in having no black on the head; forehead, lores and eyelids ashy white (sometimes grey); ear-coverts grey like the crown; dark portions of webs of tail-feathers entirely green both above and below, and their pale ends rather smaller and very pale orange, not red; the red on the under parts of a more orange shade, and confined to the chin, throat, and centre of chest. Wing 3.9 inches. Gold Coast (Swanzy).

The Many-coloured Bush-Shrike ranges from the Gambia to Togoland.

The type of the species, figured by Gray, now in the British Museum, is labelled "West Africa," and the only authority for its occurrence in the Gambia is Dr. Hartlaub, who states that he has seen an example collected there by Bowden. In Sierra Leone Robin Kemp obtained a single individual at Bo, in July, 1903, while in Liberia it was procured by Büttikofer in several localities, and on the St. Paul River by McDowell for Cassin.

Governor Ussher states (Ibis, 1874, p. 64) that this species is tolerably common near Cape Coast in the Gold Coast Colony, but more frequent in the interior. Its habits much resemble those of *L. barbarus*. There are specimens from Accra (Haynes), Fantee (Higgins), and Denkara (Blissett), in the British Museum.

The two specimens from which I have taken my descriptions were presented to me by my friend Mr. Swanzy, and are very probably a pair shot together during the breeding season, as they are both in full adult plumage. Immature

birds may be always recognized by having some yellow markings on the wing-coverts, and at all ages the black on the head of the males is more or less present.

In the neighbouring German colony of Togoland examples of this species have been collected for the Berlin Museum by Baumann and Count Zech.

The bird described by Neumann as *C. liberianus* is almost certainly only a young example of this species.

Chlorophoneus batesi.

Chlorophoneus batesi, Sharpe, Ibis, 1908, p. 330 *River Ja, Camaroon*.

Adult male. Resembling *C. multicolor*, but distinguished by its much richer coloration; the red of the lower parts, which is of a brighter shade, extends to the under wing- and tail-coverts; the tail-feathers are black above and below, and show no green, and the tail-tips are bright scarlet, not orange-red. Length 8·5 inches, culmen 0·6, wing 3·7, tail 3·5, tarsus 0·95. Type, River Ja. 25. 3. 06 (Bates).

Female. The scarlet of the under parts fades into greenish on the flanks, and yellow on the abdomen and under tail-coverts; there is no black band on the side of the head, and the tail is green like the back and tipped with pale orange. Wing 3·7 inches. River Ja. 7. 1. 06 (Bates).

This species is known only from the original series of two males and two females collected by G. L. Bates on the River Ja in the interior of Camaroon.

Chlorophoneus preussi.

Cosmophoneus preussi, Neum. J. f. O. 1899, p. 393 *Victoria*.

Chlorophoneus preussi, Reichen. Vög. Afr. ii. p. 565 (1903), Atlas pl. 9, fig. 1; Sharpe, Handl. B. iv. p. 290 (1903).

Closely resembling *C. multicolor*, this species is distinguished by the absence of the white on the front of the head and above the eye. The whole of the head is grey up to the black surrounding band, but the grey is slightly darker posteriorly. Iris violet (Neumann).

The types of this species were obtained by Preuss at Victoria in Camaroon on March 16 and 25, 1898, and so far as I am aware these are the only specimens known.

Chlorophoneus melamprosopus.

Laniarius melamprosopus, Reichen. J. f. O. 1878, p. 209 *Liberia*.

Malaconotus melamprosopus, Shelley, B. Afr. i. No. 770 (1896).

Chlorophoneus melamprosopus, Reichen. Vög. Afr. ii. p. 564 (1903); Sharpe, Handl. B. iv. p. 291 (1903).

Laniarius zosterops, Büttikofer, Notes Leyd. Mus. 1889, p. 98 *Liberia*.

Cosmophoneus reichenowi, Neum. J. f. O. 1899, p. 393 *Camaroon*.

Chlorophoneus reichenowi, Reichen. Vög. Afr. Atlas, pl. 9, fig. 2 (1905).

Laniarius graueri, Hartert, Bull. B. O. C. xiii. p. 9 (1908), id. Nov. Zool. 1909, p. 335 *Forest region west of Lake Albert Edward*.

Adult male. A broad black band covering the forehead is continued back over the sides of the head and halfway down the sides of the neck, and is margined on the crown by a narrow, short, white eyebrow, which merges into a broad patch of white on the front of the crown; remainder of crown, and hinder half of the neck, grey; the grey extending on to the mantle where it shades into the green of the back, upper tail-coverts and wings; most of the quills have pale yellow ends, broadest towards the inner secondaries; under surface of wings blackish, with the coverts, portion of inner margins and tips of quills yellow; tail black, with yellow ends to all the feathers, broadest on the outer ones and darker below than above; chin, throat, breast and under tail-coverts rich orange yellow. "Iris red; bill black; feet horn-blue." Total length 8.8 inches, culmen 0.65, wing 3.8, tail 3.8, tarsus 1.0. Kibirau in Toro, ♂, 28. 9. 05 (Jackson).

Adult female. Differs only in the forehead, crown and sides of the head being grey, with a white mottling on the feathers of the forehead and lores; eyebrows white; wings with some yellow ends to the coverts; dark portion of tail green, not black; abdomen and under tail-coverts less orange; flanks and thighs tinged with green. Iris brownish-red. Wing 3.5. Kibirau, ♀, 28. 9. 05 (Jackson).

Another specimen marked female, but probably a young male, has the forehead and lores darker; broad yellow inner margins to the tail-feathers; yellow ends to the wing-coverts broader. Kibirau, ♀, 24. 9. 05 (Jackson).

The Orange-breasted Bush-Shrike ranges from Liberia to north Angola on the west coast of Africa, and inland to Toro in Uganda.

The type was procured by Schweizer in Liberia, and

evidently to this species should be referred the type of *Laniarius zosterops* which was obtained on the Du Queah River also in Liberia, and which had been in spirits for some time before it was described by Mr. Büttikofer.

From the Gold Coast Colony I have in my collection one of Mr. Blissett's specimens from Mankessim in the west of Fantee, and there are two others, one from Yancoomassi (Blissett), and one from Fantee (Hickman) in the British Museum.

From Camaroon there is an example collected by Crossley on Camaroon Mountain, alluded to by Sharpe (P. Z. S., 1891, p. 611), and four (3 males and 1 female) from the River Ja, collected by G. L. Bates, while the type of Neumann's *C. reichenowi* was obtained by Preuss at Victoria, in the same colony.

From N'Dalla Tando, in northern Angola, there is a fine adult male in the British Museum collected by Ansorge.

Laniarius graueri, recently described by Hartert, from a series collected by Grauer in the great Congo Forest to the west of Lake Albert Edward, and subsequently in another locality to the west of Lake Tanganyika, appears to me to be indistinguishable from this species. The smaller amount of white on the forehead, and the more greenish tail, at first seem to afford some ground for separation, but two fine males from Kibirau in Toro in western Uganda, in Mr. Jackson's collection, are intermediate in this respect between Grauer's specimens from the Congo Forest and those from West Africa proper, while these last vary considerably among themselves in both these characters.

Chlorophoneus nigrifrons.

Laniarius nigrifrons, Reichen. Orn. Monatsb. 1896, p. 95 *Kilimanjaro*.

Chlorophoneus nigrifrons, Reichen. Vög. Afr. ii. p. 560, iii. pl. 9, fig. 3 (1903); Sharpe, Handl. B. iv. p. 291 (1903); Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 113, pl. 2, fig. 3 (1910).

Cosmosponeus nigrifrons, Neum. J. f. O. 1899, p. 396.

Laniarius abbotti, Richmond, Auk, 1897, p. 161 *Kilimanjaro*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 114 (1910).

Chlorophoneus abbotti, Reichen. Vög. Afr. ii. p. 560 (1903).

Chlorophoneus miniatus, Madarasz, Ann. Nat. Mus. Hungar. ii. p. 205 (1904) *Kiboscho*; Reichen. Vög. Afr. iii. p. 833 (1905).

Subspecies a.—Chlorophoneus manningi.

Malaconotus manningi, Shelley, Bull. B.O.C. viii. p. 35 (1899); id. Ibis, 1899, p. 369, pl. v. *Nyasa-Tanganyika Plateau*.

Chlorophoneus manningi, Sharpe, Handl. B. iv. p. 291 (1903).

Laniarius manningi, Swynnerton, Ibis, 1908, p. 59 *Gazaland*.

Chlorophoneus nigrifrons [non Reichen.] Neave, Ibis, 1910, p. 226 *Katanga*.

Adult male. A broad frontal band and the sides of the head black; crown, hinder half of neck and the upper back deep grey, passing into black next to the yellow throat; remainder of the upper parts green, with scarcely any trace of yellow ends to the quills; tail, with very narrow pale yellow ends to all but the centre pair of feathers; under surface of wings dusky black with broad inner margins to the quills and the coverts sulphur yellow; under parts bright yellow shaded with orange on the lower throat and front of chest and with a slight olive tinge on the flanks and thighs. "Iris dark red; bill and feet almost black." Total length 7·8 inches, culmen 0·7, wing 3·5, tail 3·6, tarsus 0·95. Foot of Mount Kenia, ♂, 16. 8. 99 (Mackinder).

Subspecies C. n. manningi. Differs from the typical form in the deeper orange red shade of the breast and throat, in other respects closely resembling it. Iris crimson, bill black, feet blue grey. Total length in the flesh 7·35, wing 3·5, culmen 0·65, tail 3·1. Chirinda Forest, ♂, 13. 4. 07 (Swynnerton).

A female, also obtained by Swynnerton, does not differ from the male.

The Black-fronted Bush-Shrike is a strictly forest-haunting bird and was first obtained in the woodlands at the base of Kilimanjaro by von der Marwitz. It was subsequently obtained by Abbott and Kittenberger in the same neighbourhood, and in both cases given a fresh name by Richmond and Madarasz respectively. Mackinder collected one specimen in the thick forest near the foot of Mount Kenia at about 7,000 feet, which is now in the British Museum, and Ansorge and Lord Delamere each took a single example on the Kikuyu escarpment. Mr. Jackson's collection also contains a speci-

men—a male obtained near Nairobi, at about 5,400 feet on December 5, 1909, and another which I take to be a young bird from Kibirau in the Toro province of western Uganda; while I would also refer three Bush-Shrikes collected by Grauer in the forest west of Tanganyika, now in the Tring Museum, to the same form. Further south on the Nyasa-Tanganyika plateau, a Bush-Shrike only differing from the above by its more fiery orange breast was obtained by the collectors attached to the Anglo-German Boundary Commission and named after Lieutenant-Colonel, now Sir William, Manning, the Deputy Commissioner for British Central Africa.

Further south, in Gazaland, on the eastern borders of southern Rhodesia, Swynnerton has recently obtained a pair of these Bush-Shrikes. He writes: "On August 19, 1906, I watched a pair of these handsome Shrikes moving about quietly amongst the foliage on the outskirts of the Chirinda Forest and secured the female; on the 27th of the same month I observed a third at the same spot, and on April 13 of this year Odendaal shot a fine male some 200 yards higher up on the forest outskirts. The stomach of the first contained three larvæ, a large wasp and beetles."

Recently Neave obtained a single female "in dense forest," near Kambove, at 4,500 feet, February 21, 1907. This locality is in the Katanga district of Congoland not far from the border of north-west Rhodesia. This specimen is undoubtedly identical with the type of *C. n. manningi*.

If the sexing of the examples in the British Museum is correct, this species differs from all the others in the genus in having the sexes alike, the female having the black band on the sides of the head.

Chlorophoneus nigrithorax.

Laniarius nigrithorax, Sharpe, *Ibis*, 1871, p. 417 *Accra*; Reichen. J. f. O. 1897, p. 32 *Togoland*.

Malaconotus nigrithorax, Shelley, B. Afr. i. No. 772 (1896).

Chlorophoneus nigrithorax, Reichen. Vög. Afr. ii. p. 566 (1903).

Laniarius melanothorax, Sharpe, *Ibis*, 1881, p. 605; Gadow, Cat. B. M. vii. p. 157, pl. iv. (1883).

Chlorophoneus melanothorax, Sharpe, Handl. B. iv. p. 291 (1903).

Adult. A broad forehead, sides of head, chin, front half of neck and front of chest, jet black; crown, hinder half of neck and the upper mantle, grey, with white shaft-stripes to most of the feathers of the crown; remainder of upper parts green, with pale yellow ends to most of the quills and a trace of yellow ends on a few of the greater and primary coverts; under surface of quills blackish, with broad inner margins and small tips of sulphur yellow, like the under wing-coverts; tail, above green with the shafts of the feathers black up to the moderately broad orange ends: beneath the shafts of the feathers are white, and the dark portion of the tail blackish with yellowish edges and bases; breast and thighs yellow inclining to green on the flanks, and strongly washed with scarlet on the chest and under tail-coverts. "Iris violet, bill black, feet lead-grey" (Baumann). Total length 7·7 inches, culmen 0·7, wing 4·0, tail 4·0, tarsus 1·0. *Accra*, type (Haynes).

The Black-breasted Bush-Shrike is only known from the Gold Coast Colony and Togoland.

The type was procured at *Accra* by the late Governor Haynes and is now in the British Museum. A second example, a male, now in the Berlin Museum, was obtained at *Agome Tongbe* in *Togoland* by Baumann, on May 1, 1894. According to Neumann the latter specimen is orange yellow, not orange red, on the under parts and the tail-tip yellow, not orange. No other specimens have been recorded.

Chlorophoneus sulfureopectus.

Tschagra sulfureopectus, Lesson, *Traité*, p. 373 (1831) *Senegal apud Neumann*.

Laniarius sulfureipectus, Gadow, Cat. B. M. viii. p. 159 (1883) *in part*.

Malaconotus sulfureipectus, Shelley, B. Afr. i. No. 769 (1896) *in part*.

Chlorophoneus sulphureipectus, Sharpe, Handl. B. iv. p. 291 (1903);

Reichen. Vög. Afr. ii. p. 561 (1903); Oates and Reid, Cat. B. Eggs,

B. M. iv. p. 291, pl. xiii. fig. 8 (1905); Reichen. Mittl. Zool. Mus.

Berl. v. p. 222 (1911) *Cameroon*.

? *Malaconotus superciliosus*, Swains. B. W. Afr. i. p. 239 (1837).

Malaconotus chrysogaster, Swains. B. W. Afr. i. p. 244, pl. 25 (1837)
Senegal.

Malaconotus aurantiopectus, Lesson, Rev. Zool. 1839, p. 101 *Senegambia*.

Subspecies a.—Chlorophoneus similis.

Malaconotus similis, Smith, Rep. Exp. Centr. Afr. p. 44 (1836); id.
Ill. S. Afr. Aves, pl. 46 *N. of Kurrichane*.

Chlorophoneus sulfureopectus similis, Reichen. Vög. Afr. ii. p. 563
(1903); W. Sclater, Ibis, 1911, p. 289 *Zululand and N. E. Transvaal*.

Laniarius similis, Ogilvie-Grant, Ibis, 1907, p. 589 *Lake Tineo*; id.
Trans. Zool. Soc. xix. p. 339 (1910) *Ruwenzori*.

Laniarius sulfureopectus, Stark and W. Scl. Bds. S. Afr. ii. p. 40 (1901);
Ogilvie-Grant, Ibis, 1904, p. 265 *South Abyssinia*; 1905, pp. 202, 203
Uganda; Stoehr and Sclater, J. S. Afr. Orn. Union, 1906, p. 95
N. E. Rhodesia; Swynnerton, Ibis, 1907, p. 48, 1908, p. 60 *Gaza-*
land; Haagner and Ivy, J. S. Afr. Orn. Union, 1907, p. 91 *Albany*;
Butler, Ibis, 1908, p. 227, 1909, p. 81 *Bahr el Ghazal*.

Chlorophoneus sulfureopectus, Hartert, Nov. Zool. 1902, p. 624 *Kikuyu*.

Chlorophoneus chrysogaster, Sharpe, Handl. B. iv. p. 292 (1903);
Jackson, Ibis, 1906, p. 550 *Toro and Ankole*; Neave, Manchester
Mem. li. 1907, No. 10, p. 73 *N. E. Rhodesia*; Chubb, Ibis, 1909,
p. 161 *Bulawayo*; Neave, Ibis, 1910, p. 227 *Katanga*.

Chlorophoneus sulfureopectus chrysogaster, Reichen. Vög. Afr. ii. p. 562
(1903); Erlanger, J. f. O. 1905, p. 695 *N. E. Afr.*; Koenig, Ber.
Intern. Orn. Kongr. 1910, p. 511 *Redjaf*.

Cosmophoneus sulfureopectus suahelicus, Neumann, J. f. O. 1899, p. 395
Kakoma.

Chlorophoneus sulfureopectus suahelicus, Neumann, J. f. O. 1905, p. 221
S. Abyssinia; Sjöstedt, Kilimandjaro-Meru Exped. p. 114 (1910).

Laniarius modestus, Bocage, Jorn. Lisb. 1867, p. 151 *Benguella*.

Chlorophoneus modestus, Sharpe, Handl. B. iv. p. 292 (1903).

Chlorophoneus sulfureopectus modestus, Reichen. Vög. Afr. ii. p. 564
(1903).

Adult male. Forehead and eyebrows bright yellow; crown, hinder half of neck and front of mantle lead-grey, with a wash of yellow on the front half of the crown; remainder of upper parts mostly uniform yellowish green, with some narrow yellowish white terminal margins to the secondaries, and also sometimes on the primaries and greater wing-coverts as well; tail with the ends of the outer four pairs of feathers orange shaded yellow, which colour extends down the inner webs of these feathers; under surface of quills dusky, with broad inner edges of bright yellow of the same shade as the under wing-coverts; sides of head from the lores to ear-coverts black; below

yellow throughout with a wash of orange red on the breast. "Iris dark brown; bill black; feet grey." Total length 7 inches, culmen 0.55, wing 3.5, tail 3.5, tarsus 0.95. Cape Coast, ♂, 10.6.00 (Alexander).

Adult female. Like the male but the black of the side of the head replaced by grey and with less orange on the breast. River Volta, ♀, 5.4.01 (Alexander).

Immature. Differs in having no yellow or black on the head; sides of forehead, a mottling on sides of head, and the chin white. In younger birds the head and under parts are whitish with numerous dusky bars; base of lower mandible pale.

Subspecies C. s. similis. The birds from South and East Africa only differ from the typical West African form in having the ear-coverts grey, or black fading into grey posteriorly. The other distinctions given by Neumann and Reichenow seem to be none of them constant, and to be dependent on age and sex.

The Orange-breasted Bush-Shrike has a wide distribution all over Africa from Senegal, the Bahr el Ghazal Province of the Sudan and south Abyssinia south to Cape Colony.

The habitat of the type of the original description of the species by Lesson is not given, but there are reasons to believe that it came from Senegal and it is to that province that it has been assigned by Neumann. The type of *M. chrysogaster* of Swainson undoubtedly came from the same place, Senegal, and I can see no reason for transferring his name to the south and east African subspecies as has been done by some authors. For the south and east African form Smith's name *similis* is available and very suitable; the type locality is north of Kurrichane, which is somewhere on the banks of the Upper Limpopo in the north-west Transvaal.

Neumann was the first author to divide the present species into subspecies. He recognized four races: (1) The typical west African form; (2) the south African form, *C. s. similis*; (3) the east and north-east African form, *C. s. suahelicus*; (4) the Angola form *C. s. modestus*. The last named appears to have been described from a young bird and was subsequently identified by Bocage with the typical form. A good series

from Malange in northern Angola obtained by Ansorge shows no appreciable difference from the south African forms, and the same is the case with examples from British East Africa and Abyssinia. I have, therefore, included all the south and east African specimens under one heading, *C. s. similis*, as distinguishable from the west African typical *C. sulfureopectus*.

In Senegambia, in addition to the types of Lesson and Swainson already mentioned, the typical race has been obtained by Verreaux at Casamanse, and by Rendall in the Gambia colony, but it was never met with by Büttikofer in Liberia. Ussher procured this bird at Denkeria on the Gold Coast, and Mr. T. E. Buckley and I found it rather sparingly distributed, though most abundant at Accra, where we met with them among the scattered bushes of the plains, from which it was most difficult to drive them; their alarm note is harsh and not musical.

The subspecies *C. s. similis* is found all over the rest of Africa and is not always distinguishable from the west African typical form. There is an example in the British Museum from Durban, and another in the Tring Museum from Barberton, in which the ear-coverts are quite as black as in those from the Gold Coast.

In South Africa the Orange-breasted Bush-Shrike ranges over the eastern half of Cape Colony from the Albany division eastwards to Natal and Zululand. In the Transvaal it is only found in the bushveld of Lydenburg and Zoutpansberg, and along the upper valley of the Limpopo, but in Rhodesia and along the Zambesi it is not uncommon. Swynnerton states that it is very shy, but that he constantly heard its clear cry of "pipitye pipitye," often continuing long after sunset. Its alarm note is harsh like that of *Malaconotus hypopyrrhus*.^{*} Its food, as shown by an examination of its stomach contents, consisted of beetles, larvæ, and large hairy caterpillars.

Alexander found a nest on the Zambesi. It was placed in acacia bush about 30 feet above the ground, and was made of coarse bents, lined with finer material of the same kind. The eggs, three in number, were greenish white, spotted and blotched with brown at the larger end to form a zone; they averaged 0.85×0.62 .

. Throughout East Africa, from the Zambesi to Shoa and the Bahr el Ghazal and westward through Angola and to the Belgian Congo and Ruwenzori, this bird has been met with by many collectors, though there are hardly any observations recorded on its life-history.

In the British Museum there is a very extensive series of examples of this species as follows:—

C. sulfureopectus: Senegal; Gambia (Whiteley); Sierra Leone (Tweeddale Coll.); Gold Coast Colony—Cape Coast (Alexander and Buckley), Volta River (Alexander), Accra (Smith, Shelley, and Haynes), Fantee (Ussher).

C. s. similis: Natal—Durban (Ayres, Gordge), St. Lucia Bay (Woodward), Umfolosi Station (C. Grant); Transvaal—Swaziland (Buckley), Lehtaba River (Ayres and Grant), Upper Limpopo (Buckley), Klein Letaba (C. Grant); S. Rhodesia—Gazaland (Swynnerton), Hunyani River (Clark), Macloutsie (Oates); Portuguese East Africa—Tete (Livingstone and Alexander), Zumbo (Alexander); N. Rhodesia—Kafue River (Alexander), Chambezi valley (Neave); Nyasaland—Zomba and Milanji plains (Whyte); Angola—Cunene River (Anderson), Humbe (Anchietta), Malange and N'Dalla Tando (Ansorge); Portuguese Congo—Landana (Petit); Belgian Congo—Lufupa River (Neave), Ruwenzori up to 5,500 feet (Ruwenzori Exped.); Uganda—Mulema and Ankole (Delmé Radcliffe), Wadelai (Emin); German East Africa—Mamboio (Kirk), British East Africa—Manda Island (Jackson), Melinde (Kirk), Teita (Hunter), N. E. Kenia and Gessima River

(Delamere); *Abyssinia*—Hoorsa and Lake Zwai (Degen), Roguecha (Pease); *Egyptian Sudan*—Lake Tinero (Zaphiro); *French Congo*—Mombattu country and Shari River (Alexander).

Chlorophoneus rubiginosus.

Malaconotus rubiginosus, Sundev. Oefv. Vet. Akad. Förh. Stockh. 1850, p. 106 *Caffraria inferior* (i.e., Natal).

Laniarius rubiginosus, Gadow, Cat. B. M. viii. p. 160 (1885); Stark and W. Sclater, Bds. S. Afr. i. p. 37 (1901); Shortridge, Ibis, 1904, p. 183 *Pondoland*; C. H. Taylor; J. S. Afr. Orn. Union, 1907, p. 20 *Ermelo*; Haagner and Ivy, *ibid*, p. 90, pl. iii. fig. 10 (egg), *Albany*.

Pelcinus rubiginosus, Shelley, B. Afr. i. No. 766 (1896).

Chlorophoneus rubiginosus, Reichen. Vög. Afr. ii. p. 558 (1903); Sharpe, Handl. B. iv. p. 292 (1903); W. L. Sclater, Ibis, 1911, p. 289 *Zululand and Transvaal*.

Malaconotus oleagineus, Licht. Nom. p. 12 (1854) *nom. nud.*

Laniarius maraisi, W. L. Sclater, Ibis, 1901, p. 183, pl. 6 *juv. Knysna*.

Chlorophoneus maraisi, Sharpe, Handl. B. iv. p. 292 (1903).

L'Olive, Levaillant, Ois. d'Afr. ii. p. 107, pl. 75, fig. 2, pl. 76, fig. 1.

Adult male. Sides of the forehead, lores, and an eyebrow extending back from above the eye white; remainder of sides of head and a band down the side of neck black; crown and hind neck lead-grey; back and wings uniform green; quills beneath dusky blackish with sulphur-yellow inner margins: under wing-coverts a slightly darker yellow; tail black fading into green towards the outer feathers and some pale yellow ends, mostly confined to the inner webs; throat and chest buffy-cinnamon; abdomen and under tail-coverts white, thighs shaded with olive; flanks more ashy, with obsolete olive tinted bars. "Iris hazel; bill black; feet grey" (Shortridge). Total length 7 inches, culmen 0.65, wing 3.2, tail 3.2, tarsus 1.0. ♂, Durban (Gordge).

Female. Differs in having the black of the head and neck replaced by grey of scarcely a darker shade than the crown; tail green, scarcely darker than the back, and the pale portion confined to a few narrow, yellowish, terminal and inner margins to the feathers; flanks showing traces of barring. Bill fading into palish horn-colour towards the base of the lower mandible. Wing 3.25. Newcastle, ♀, 29. 7. 81 (A. E. Butler).

Immature. Olive green above, including the wings and tail, below the throat dull white, the rest of the under parts washed with olive, the breast with transverse mottlings of dusky, less marked on the flanks. Macamac, 10. 12. 74 (Ayres).

The Ruddy-breasted Bush-Shrike is found in the eastern and southern portions of South Africa, from the neighbourhood of George in Cape Colony eastwards along the coast and bush districts to the Zoutspansberg district of the Transvaal.

It was first discovered by Levillant, who met with it about the lower courses of the Gamtoos, Swartkops and Sunday rivers, in the neighbourhood of Port Elizabeth, and who called it the "Oliva." Sundevall's description was founded on a bird obtained by Wahlberg, near Durban. It is not uncommon in the Knysna Forest, where it was obtained by Victorin and Andersson, while *L. maraisi*, founded on a bird in immature plumage, was collected by Marais in the same district.

Ayres obtained a good series of this Bush-Shrike both near Durban and in the Lydenburg district of the Transvaal. He writes: "No doubt these Bush-Shrikes are amongst the mountains all the year round, but they are particularly shy and difficult to see, especially during the breeding season, when they make the woods joyous with their varied songs and calls. Many of their notes are very liquid, and remind me much of those of the nightingale. During the winter they are silent."

Claude Taylor, who found this species in the Ermelo district of the Transvaal, and Claude Grant, who procured specimens in Zululand and at Woodbush in the Zoutspansberg district of the Transvaal, both comment on the difficulty of observing this species owing to its retiring habits.

Haagner and Ivy describe the nest and eggs of this bird taken by the latter at Blaauw Krantz, in the Albany division of Cape Colony, January 10, 1895. The nest was small and almost flat, and so slight that the eggs could be seen through it. The eggs are ovate, light greyish in hue, with irregular blotches and spots of lavender and brown,

chiefly longitudinal in shape; they measure about 0.9×0.5 . The number of the clutch is not given.

The examples in the British Museum examined are as follows: *Cape Colony*—Knysna (Andersson), Grahamstown (Atmore), King Williamstown (Trevelyan), Pondoland (Woodward); *Natal*—Durban (Gordge and Ayres), Newcastle (Butler); *Zululand*—Lower Umfolozi (Woodward), Sibudeni and Ngoye (C. Grant); *Transvaal*—Macamac (Ayres), Lydenburg (Barrett), Woodbush and Legogot (Grant).

***Chlorophoneus bertrandi*.**

Laniarius bertrandi, Shelley, Ibis, 1894, p. 15, pl. 2, fig. 2 *Milanji*;

Swynnerton, Ibis, 1907, p. 48, 1908, p. 57 *Gazaland*.

Pelicius bertrandi, Shelley, B. Afr. i. No. 767 (1896).

Chlorophoneus bertrandi, Reichen. Vög. Afr. ii. p. 559 (1903); Sharpe, Handl. B. iv. p. 292 (1903).

Male. Very similar to *C. rubiginosus*, but differs in being a rather larger bird with a stronger bill; head with the black extending rather further forward over the white loreal patch, and with scarcely any indication of the white eyebrow; flanks, thighs and under tail-coverts shaded with olive; tail black with yellowish tips and greenish margins to the two outer pairs of feathers; in some cases, apparently males but perhaps very old females, the tail is green, as in the type originally described. "Iris bright madder brown, bill black, feet blue-grey" (Swynnerton). Total length 7.8 inches, culmen 0.75, wing 3.4, tail 3.4, tarsus 1.0. *Milanji*, 18. 4. 93 (A. Whyte).

Female. Differs in the colouring of the head, neck and under parts; upper half of head and entire hinder half of neck grey, with a little white in front of the eye; under parts whitish, and a pale rufous shade on the crop; flanks and thighs washed with green. Wing 3.2. *Milanji*, ♀, 25. 4. 93 (A. Whyte).

Immature. Has the under parts mottled and barred and no rufous on the crop.

This species takes the place of its close ally *C. rubiginosus*, from which it is hardly more than subspecifically distinct, north of the Limpopo River, and ranges northwards to Nyasaland. It was named after Captain Bertram L.

Sclater, R.E., Chief of Sir Harry Johnston's staff, as the type was obtained during his visit to the Milanji hills in September, 1893. It appears to be not uncommon in other parts of Nyasaland, as there are in the British Museum collection in addition to those from Milanji, others from Fort Lister, Mt. Malosa and Zomba, all collected by Whyte, and one from south Angoniland, collected by Manning.

Recently Swynnerton has obtained this species in Gazaland, on the eastern border of S. Rhodesia, where he found it quite common in the patches of forest. He speaks very highly of the song, and states: "Unlike Ayres, in the case of the nearly allied *L. rubiginosus*, I have found this bird to sing freely all the year round, and during my stay in the Jihu last winter its wonderfully varied notes were constantly to be heard. On November 21 I found a nest loosely placed 8 ft. from the ground in some small twigs of an *Acacia* in the grass-jungle close to my camp on the Kurumadzi. Externally it was composed chiefly of the tendrils and stems of *Rhoicissus*, with a thick lining of the fine terminal twigs of the thornless wild asparagus; it was a shallow nest, the cup being only 1.25 inches deep, and contained one unfledged nestling. The stomachs examined contained large larvæ, beetles, hymenoptera, and a mantis."

Five examples obtained by Mr. Swynnerton are preserved in the British Museum; though showing slight traces of the white eyebrow characteristic of *C. rubiginosus*, they are certainly more close to *C. bertrandi*.

Chlorophoneus rudolfi.

Laniarius rubiginosus rudolfi, Hartert Bull. B. O. C. xxiii. p. 10, 1908
50 m. W. of *L. Albert Edward*; id. Nov. Zool. 1909, p. 335 W. of
Lake Tanganyika.

Adult male. Differs from *C. rubiginosus* and *C. bertrandi* in having dark yellow tips to the outer rectrices.

Chlorophoneus olivaceus.

Lanius olivaceus, Shaw, Gen. Zool. vii. p. 330 (1809) ♀ *ex Levaillant*.

Laniarius olivaceus, Gadow, Cat. B. M. viii. p. 161 (1883); W. Sel. and Stark, Bds. S. Afr. ii. p. 38 (1901); Shortridge, Ibis, 1904, p. 183, *Pondoland*; C. Taylor, J. S. Afr. Orn. Union, 1907, p. 20 *Ermelo dist.*; Haagner and Ivy, *ibid*, p. 90 *Albany*.

Pelicius olivaceus, Shelley, B. Afr. i. No. 768 (1896).

Chlorophoneus olivaceus, Reichen. Vög. Afr. ii. p. 559 (1903); Sharpe, Handl. B. iv, p. 292 (1903).

Lanius oliva, Wilkes, Encycl. Londin. xii. p. 214 (1814) *ex Levaillant*.

L' Oliva, Levaillant Ois d' Afr. ii. p. 105, pl. 75, fig. 1 (not fig. 2) *Algoa Bay, Cape Colony*.

The Olive Bush-Shrike is confined to the coast-lands of south-east Africa from Knysna in Cape Colony to the lower Umfolosi River of Zululand; it is nowhere common and always rare in collections. The birds thought to be of this species by Swynnerton are no doubt the young of *Telophorus quadricolor* which closely resemble this species, and it would be well to examine more critically the examples taken by Taylor in the Ermelo district of the Transvaal before extending the range of the present species so far. The species was first obtained by Levaillant in the neighbourhood of what is now Port Elizabeth, but he confused it with the previous species *L. rubiginosus*, considering that the latter was the young of the former, and it was only many years afterwards that the confusion was put straight by Sundevall.

Marais obtained an example at Knysna, and Ivy states that it is very rare in Albany; Shortridge and the Woodwards met with it in Pondoland, and the Woodwards in Zululand as well as near Eschowe and on the Umfolosi River.

Guensius (J. f. O. 1870, p. 214) found the bird not rare in Natal. Its song, he tells us, consists of four notes, the first three short, the last loud and long. He found a nest about eight feet from the ground by the side of a path leading through the forest. It was placed on a branch and so carefully con-

cealed that he would have passed the two young birds which it contained, had they not uttered their cry, which he described as "wit-wit-wit" and "sirr-shracoch-wit-wit-wit."

Genus XI. NICATOR.

Nicator, Hartl. and Finsch, Vög. Ost-Afr. p. 359 (1870). *Type.*
N. chloris.

Bill rather long, slender, and compressed, with a straight culmen as far as the commencement of the hook; nostril semilunar, with a clearly-developed operculum, and partly, at any rate, exposed; rectal-bristles long and well developed; wing rounded, the fourth and fifth primaries the longest, the first about two-thirds of the second; tail rounded, about the same length as the wing; two proximal phalanges of the third and fourth toes united into a common sheath. Sexes similar, plumage green and yellow, like *Malacotus*, with pale yellow tips to the coverts and secondaries.

This genus, containing three species, is confined to tropical and south Africa. The curious character of the toes is quite unique in the family.

KEY TO THE SPECIES.

- a. Larger, no yellow band across the throat.
 - a¹. Ear-coverts yellowish, throat and breast grey *chloris*.
 - b¹. Ear-coverts, throat and breast washed with buffy *gularis*.
- b. Smaller; a broad yellow band across the throat *vireo*.

Nicator chloris. (Pl. 55, fig. 1.)

Lanius chloris, Valenc. Dict. Sci. Nat. xl. p. 226 (1826) *Galam*.

Nicator chloris, Gadow, Cat. B.M. viii. p. 166 (1883); Shelley, B. Afr.

i. No. 781 (1896); Reichen. Vög. Afr. ii. p. 554 (1903); Sharpe, Handl. B. iv. p. 299 (1903); Kemp, Ibis, 1905, p. 234 *Sierra Leone*; Jackson, Ibis, 1906, p. 552 *Toro*; O.-Grant, Ibis, 1908, p. 292 *Ponthierville*; Trans. Zool. Soc. xix. p. 339 (1910) *Ruwenzori*; Sharpe, Ibis, 1908, p. 334 *Camaroon*; Bates, Ibis, 1909, p. 34; Neave, Ibis, 1910, p. 228 *Katanga*; Reichenow, Mittl. Zool. Mus. Berlin, v. p. 82 (1910) *Rio Benito*.

Malaconotus peli, Bonaparte, Consp. Av. p. 360 (1850) *Ashantee*.

Laniarius lepidus, Cass. Proc. Philad. Acad. 1855, p. 327 *Liberia*.

Nicator chloris laemocylus, Reichenow, J. f. O. 1909, p. 108 *Beni Forest*; id. Deutsch. Zentr. Afr. Exp. iii. p. 311.

Adult male. Upper parts dark olive green, paler on the rump, upper tail-coverts and edges of the wing- and tail-feathers, median and greater



1. *Nicator chloris* 2. *Nicator gularis*

wing-coverts and inner secondaries with bold pale yellow terminal spots; the tail with less distinctly defined yellow ends to all but the four centre feathers; sides of head olive yellow, with a bright yellow ring round the eye, and a clear white mark in front of the eye, edged above with black; a bright yellow spot at the base of the lower mandible, sometimes almost meeting its fellow on the other side; cheeks and under parts ashy white, with the flanks and thighs greenish yellow, the under tail-coverts, underwing-coverts, and inner margins of the quills bright sulphur yellow. Iris brown ochre; bill greenish black; feet greenish blue grey. Total length 9.75 inches, culmen 0.8, wing 4.0, tail 4.2, tarsus 1.10. Gunned, ♂, 16. 7. 09 (Ansorge).

Adult female. Is much smaller, but otherwise like the male. Wing 3.4, tail 3.9, tarsus 0.95. Gunned (Ansorge).

The White-throated *Nicator* ranges over western Africa from Senegambia to the Congo, and eastwards to Katanga and Uganda. The type described by Valenciennes came from Galam in Senegal. Reichenow has recently proposed to recognize examples from the Congo Forest, near the Semliki valley, as a distinct subspecies, because the yellow spot at the base of the lower mandibles is continued as a band right across the throat; but I find on examining the large series in the British Museum that the size and extent of yellow varies with individuals, and that the band is as complete in some of the West African specimens as in some of those from the Semliki.

This bird was obtained by Büttikofer in Liberia, and by many collectors in the Gold Coast Colony, as well as in Cameroon and Gaboon, as far as the Congo. South of this river, Mechow met with it on the Kuango River, but it does not seem to reach Angola proper; Neave found it in Katanga. In the lakes region it has been procured by Jackson at Entebbe and Busoga, by the Ruwenzori Expedition in the Semliki valley and at Fort Portal, and by the Duke of Mecklenburg's Central-African Expedition, in the forest north-west of Fort Beni, in Semliki.

Everywhere it is a bird of the thick forest, and is generally best known by its guttural churring note, rapidly repeated, which is compared by Sjöstedt to the squeak of a squirrel. It feeds chiefly on insects. Bates states that in Camaroon, where it is known as "Ekong" or "Ntyong," "it stays on the borders of the forest, or among the higher trees of second growth, and generally keeps itself well hidden; for when it comes to light its spotted wings make it conspicuous. The only sound ordinarily heard is a scolding noise, which is imitated in the explosive nasal sounds of the Balu names. But, on one occasion, I watched it sing a song, in a loud, clear tone, consisting of quite a variety of notes, some so much run together as to remind me of the peculiar trill of the *Pomatorhynchus*. The song was uttered languidly, a few notes at a time."

A sitting female was shot with a bow and arrow on the nest. This fabric was a poor excuse for a nest, a mere pad of dry tendrils and weed-stalks mixed together, so small that the bird could completely hide it. There was a little depression on the top where one egg had been laid. This is a blunt oval, and slightly glossy. The ground colour is pale yellowish-clay colour, densely spotted all over, especially on the larger end, where the under-markings form an irregular clouded zone, with small spots and dots of dull reddish-brown and dark grey."

I have examined examples in the British Museum from the following localities:—

Portuguese Guinea—Gunnal (Ansorge); *Sierra Leone*—Bo (Kemp); *Liberia*—Grand Cape Mount (Büttikofer); *Gold Coast Colony*—Ashantee (Gould), Fantee, Denkera (Ussher), Wassaw (Blissett), Abouri (Shelley and Buckley), Prahsu (Alexander); *S. Nigeria*—Burutu (Kemp); *Camaroon*—Camaroon Mountain (Crossley), Efulen and River Ja

(Bates); *French Congo*—Rio Benito and Como River (Bates) Moonda River and Gaboon (du Chaillu); *Belgian Congo*—Aruwimi River (Jameson), Lualaba in Katanga (Neave), Ponthierville (Carruthers), and Fort Beni (Ruwenzori Exped.); *Uganda*—Fort Portal (Ruwenzori Exped.), Toro and Entebbe (Jackson); *Belgian Congo*—Welle River (Alexander); *French Congo*—Kubedje, between Lake Chad and Ubangi (Alexander).

Nicator gularis. (Pl. 55, fig. 2.)

Nicator gularis, Finsch. and Hartl. Vög. Ost-Afr. p. 360 (1870) *Tete*; Gadow, Cat. B. M. viii. p. 167 (1883); Shelley, B. Afr. i. No. 782 (1896); Stark and Sel. Bds. S. Afr. ii. p. 43, fig. 10 (1901); Reichen. Vög. Afr. ii. p. 555 (1903); Sharpe, Handl. B. iv. p. 299 (1903); Erlanger, J. f. O. 1905, p. 695 *S. Somaliland*; Stoeckh and Sel. J. S. Afr. Orn. Union, 1906, p. 95 *Feira*; Sheppard, *ibid.* 1909, p. 29, 1910, p. 42 *Beira*; Swynnerton, Ibis, 1908, p. 61 *Gazaland*; Bannerman, Ibis, 1910, p. 691 *Kilimanjaro*; Sjöstedt, Kilimandjaro. Meru Exped. p. 113 (1910); W. Selater, Ibis, 1911, p. 290.

Adult male. Similar to *N. chloris*, but distinguished by the colouring of the head and throat; forehead and front half of the crown ashy-brown; sides of head pale brown with a yellow and white patch in front of the eye; throat brownish-buff fading into whitish on the chin; in other respects resembling the previous species. Iris hazel; bill horn coloured; legs and feet slate; eyelids yellow. Length 9·3 inches, wing 4·15, tail 4·2, culmen 0·8, tarsus 1·2. Zambesi below Zumbo, ♂, 27. 10. 98 (Alexander).

Female. Has the spot in front of the eye white with no yellow, and is markedly smaller. Wing 3·5, tail 3·4, tarsus 1·1.

The Zambesi *Nicator* ranges from the lower valley of the Juba River on the Somaliland border southwards to Zululand.

It was described by Hartlaub from an adult male and a young female obtained at Shupanga and Tete respectively by Sir John Kirk during the Livingstone Expedition.

In Zululand, the most southern point of its range, it was procured on the Ivuna, Umkusi, and Pongola rivers by the Woodward brothers. They describe it as solitary and silent,

and fond of penetrating the thick scrub on the borders of bushes and of hopping about among the branches of the lower trees. Further north Swynnerton found it in various localities in Gazaland. He describes it as very shy, and difficult to detect in the thick foliage of the trees in which it lives; its song was loud and musical, and interspersed with harsher "Tyiurr" notes. On the Zambesi Alexander met with it between Zumbo and the Kafue, and writes: "This uncommon Shrike is seldom seen away from thick woods, being of an extremely shy nature."

In Nyasaland it was obtained only once at Chiromo by Whyte, but in German and British East Africa it has been met with by Fischer, Neumann, Hildebrandt, and Kirk at various localities; while Erlanger took a single specimen at Solole in the lower valley of the Juba River between Bardera and Kismayu.

Sheppard found a nest near Beira on December 17, 1909. It was built in a low bush in thick woods, and was a somewhat rough structure of twigs, grass, fibrous roots, and bits of bamboo leaves. It was cup-shaped, and measured three inches across the top, inside diameter. The eggs are described by Sheppard as closely resembling those of *Pycnonotus layardi*. They were three in number and measured 0.62×0.87 .

The British Museum contains examples from the following localities:—

Zululand (Woodward Bros.); *Rhodesia* — Gazaland (Swynnerton); *Zambesi River*—Shupanga and Tete (Kirk), between Zumbo and the Kafue (Alexander); *Nyasaland*—Chiromo (Whyte); *Portuguese East Africa* — Coguno (C. Grant), Rovuma River (Thomson); *German East Africa*—Kilimanjaro (Percival); *British East Africa*—Lamu (Kirk).

Nicator vireo.

Nicator vireo, Cab. J. f. O. 1876, p. 333, pl. 2, fig. 2 *Chinchonxo*; Gadow, Cat. B. M. viii. p. 166 (1883); Shelley, B. Afr. i. No. 783 (1896); Reichen. Vög. Afr. ii. p. 299 (1903); Sharpe, Handl. B. iv. p. 299 (1903); Sharpe, Ibis, 1908, p. 335 *Camaroon*; Bates, Ibis, 1909, p. 35; Reichen. Mittl. Zool. Mus. Berl. v. p. 82 (1910) *Rio Benito*.

Adult male. Similar to *N. chloris*, but distinguished by the colouring of the head and throat, and by its smaller size. Forehead and sides of head dusky grey, with a broad yellow band from the nostril to above the eye; chin and lower throat pale grey, middle throat sulphur yellow. Iris hazel; bill greenish-grey, but dusky along the culmen; feet greenish-blue. Length 8·0 inches, wing 3·2, tail 3·3, culmen 0·5, tarsus 0·9. N'Dalla Tando, ♂, 30. 8. 08 (Ansorge).

Female. Is rather duller in shade, and has not quite so much grey on the forehead; it is also markedly smaller. Wing 2·8, tail 2·9, tarsus 0·75.

The Yellow-throated *Nicator* ranges from Camaroon to Angola, and eastwards to the Ituri River, near Albert Nyanza, but is apparently confined to thick forest.

The type came from Chinchonxo in Portuguese Congo, where it was collected by Falkenstein.

In Camaroon it has been got by Zenker at Bipindi, and by Bates on the River Ja, along the Congo at Manyango and Leopoldville by Bohndorff, at Yambuya on the Aruwimi by Jameson, and at Irumu on the Ituri by Emin. Further south Mechow collected examples on the Kwango River, and Ansorge at N'Dalla Tando in northern Angola.

Bates writes as follows: "This smaller Green Shrike, which I found only at the Ja, is not so shy as its larger relative, and its loud and pleasing song is very frequently heard. This song is one of the most striking sounds of the bird-world in that district. It may be likened to a bugle-call of half a dozen notes, mostly in one tone, but with one or two towards the end in a higher pitch, the last one or two dropping again to the pitch of the first. It may

be heard at almost any time of the day. When singing the bird perches amongst the foliage of some tree usually high and out of sight."

In the British Museum this species is represented from the following localities:—

Camaroon—River Ja (Bates); *Portuguese Congo*—Chisambo (Petit); *Belgian Congo*—Aruwimi River (Jameson); *Angola*—N'Dalla Tando (Ansorge).

Genus XII. LANIOTURDUS.

Bill black, rather long and somewhat flattened being nearly as broad as deep at the nostrils; nostrils linear, with a well marked operculum and entirely exposed; a few strong rectal-bristles; wing long for the size of the bird but rounded; primaries 3 to 5 longest, 2 shorter than 9, 1 fairly long; all the quills with their bases and tips white; tail square, very short, less than half the length of the wing, white with a few black terminal patches; tarsi and feet blackish, and when outstretched the latter reach well beyond the end of the tail.

Type.

Lanioturdus, Waterhouse in Alexander's Exp. Int. Afr.

App. p. 264 (1838) *L. torquatus*.

Moquinus, Bp. Comptes Rend. xlii. p. 820 (1856) . . . *L. torquatus*.

Hypsipus, Sundev. Av. Meth. Tent. p. 24 (1872) . . . *L. torquatus*.

The genus is represented by a single species which ranges from Benguela into Damaraland.

Lanioturdus torquatus.

Lanioturdus torquatus, Waterhouse in Alexander's Exp. Int. Afr. App. p. 264 (1838) *Damaraland*; Sharpe, Cat. B. M. iv. p. 237 (1879); Shelley, B. Afr. i. No. 717 (1896); Stark and Sclat. Faun. S. Afr. ii. p. 45, figs. 11, 12 (1901); Sharpe, Handl. B. iii. p. 233 (1901); Reichen. Vög. Afr. ii. p. 475 (1903).

Platystira albicauda, Strickl. Contr. Orn. 1852, p. 144 *Damaraland*.

Moquinus albicaudus, Bp. Rev. et Mag. Zool. 1857, p. 52, pl. 5.

Moquinus tandonus, Bp. C. R. 1856, p. 820 *Damaraland*.

Adult. Frontal band extending back to above the eyes white, like the nape, sides of neck, chin and throat; crown, lores, ear-coverts and a band round the nape black; back and scapulars lead-grey, with bold white,

rounded, subterminal spots on the lower back and some of the scapulars; a few of the tail-coverts and outer scapulars blackish; tail white with a subterminal patch of black on the two centre feathers (occasionally some of the other tail-feathers are slightly marked with black); wing black, with the edge of the pinion strongly mottled with white, ends of primary-coverts, inner greater coverts, ends and basal third of quills also pure white; side of chest and the flanks lead-grey, separated from the throat by a broadish black band across the crop; centre of chest, abdomen, under tail-coverts and the axillaries entirely white; thighs white with the bases of the feathers black. Iris greenish yellow; bill black; feet dark brown. Total length 6.0 inches, culmen 0.7, wing 3.3, tail 1.6, tarsus 1.00. Otjimbique, 22. 6. 66 (Andersson).

The White-tailed Shrike inhabits Benguella and Damaraland. This very peculiar bird, with its extremely short white tail, is fairly abundant throughout its somewhat limited known range, which is from Quissange to Rehoboth, just north of the Tropic of Capricorn, and it apparently does not extend to 20° E. long.

According to Anchieta it is called by the natives, at Quissange the "Ombolo," at Capangombe the "Sequi," and at Humbe the "Bixacorimbo." The species was discovered by Sir J. E. Alexander, at Bull's Mouth Pass inland from Walfisch Bay in Damaraland.

Chapman met with it in the southern part of Damaraland frequenting the elevated open country, between Otjimbique and Rehoboth, seeking its food both on the ground and amongst the dwarf vegetation. It was shy and restless, constantly flitting with a heavy short flight from one tree or bush to the next, and was generally met with in small flocks until October when they paired to breed. Andersson remarks that, although it was shy in southern Damaraland, he found it very tame and common along the Omaruru River in October and November, when it had paired, and writes: "I love this little bird, it is so odd-looking, and often enlivens with its quaint appearance and movement an otherwise dreary and

monotonous solitude. It has a very clear plaintive call-note; but generally its notes are querulous, and at times not unlike the distant call of a cornerake."

Fleck (J. f. O. 1894, p. 402), who met with this species at Rehoboth in October and December, found caterpillars and other insects in the stomachs examined. He syllables its ringing note as "Tchak-tchak-tchak," and gives a figure of it in black and white. The British Museum contains examples of this species from Otjimbinque in German South-west Africa (Andersson), and from Humbe and Biballa in southern Angola (Anchieta).

Family V. PRIONOPIDÆ.

Bill Shrike-like, more or less strongly notched and hooked; resembling in general form and characters the *Laniidæ*, but with the postero-lateral aspect of the tarsus covered with a series of scutes like the anterior aspect, instead of by two long undivided laminæ as in the *Laniidæ*.

KEY TO THE GENERA.

- a.* Eyelids and feathers of the head normal; bill black.
 - a*¹. Crown white; first primary as long as the secondaries; rictal-bristles strong *Eurocephalus*.
 - b*¹. Crown black; first primary much shorter than the second; rictal-bristles rudimentary *Nilaus*.
- b.* With fleshy wattles round the eye; head more or less crested.
 - c*¹. Bill blackish, visible portion of the culmen about equal to the diameter of the eye *Prionops*.
 - d*¹. Bill red or orange; visible portion of the culmen at least twice the diameter of the eye *Sigmodus*.

Genus I. EUROCEPHALUS.

Bill black; culmen very evenly curved from beyond the frontal feathers, which are stiff and forwardly directed over the basal third of the culmen and entirely cover the nostrils; upper mandible extending considerably beyond the lower mandible and very slightly notched; rictal-bristles

strongly developed, reaching as far forward as the nostrils; wing pointed; third primary the longest; second only 0·3 inch shorter, and first more than half the length of fourth. Tail rounded and shorter than the wing. Tarsi and feet strong, the former with the sides and back scaled.

Type.

Eurocephalus, Smith, Rep. Exp. C. Afr. App. p. 52

(1836). *E. anguitimens.*

Chætoblemma, Swains. Class. B. ii. p. 219 (1837) . *E. anguitimens.*

The genus is confined to Tropical and South Africa and comprises two species.

KEY TO THE SPECIES.

- a.* Entire back brown *anguitimens.*
b. Rump, upper tail-coverts and base of tail white. *rueppelli.*

Eurocephalus anguitimens. (Pl. 56, fig. 2.)

Eurocephalus anguitimens, Smith, Rep. Exp. C. Afr. App. p. 52 (1836)

N. of Latakoo; Sharpe, Cat. B. M. iii. p. 279 (1877); Shelley, B. Afr. i. No. 688 (1896); Nehrkorn, Cat. Eiers. p. 21 (1899) *egg*; Stark and Sel. Bds. S. Afr. ii. p. 13 (1901); Reichen. Vög. Afr. ii. p. 525 (1903); Oates and Reid, Cat. B. Eggs, Brit. Mus. iv. p. 266 (1905); Sparrow, J. S. Afr. Orn. Union, 1905, p. 11; Bucknill, *ibid.* 1908, p. 77 *eggs*; Chubb, Ibis, 1909, p. 160 *Bulawayo*.

Chætoblemma leucocephala, Swains. An. in Menag. p. 282 (1838).

Adults. Forehead, crown and a broad band down the back of the neck white; sides of head dark brown, with the cheeks white; back, abdomen, thighs and under tail-coverts whitey-brown; entire wings and tail, both above and below, dark brown: chin, throat and chest white. "Iris dark hazel, bill and feet black." Total length 10·5 inches, culmen to frontal feathers 0·60, wing 5·6, tail 4·2, tarsus 1·0. Tati, ♂, 23. 2 (F. Oates) and ♀, wing 5·5.

Immature. Differs in having the sides of the head and neck white mottled with dark brown; feathers of wing with pale edges; breast and under tail-coverts white tinted with brown; thighs darker brown. Bill, feet and claws brown. S. Africa (A. Smith).

The Southern White-crowned Shrike ranges over south-west Africa from central Angola and the Zambesi to the Bechuanaland districts of Cape Colony and the western Transvaal.

In its north-western range this bird has been obtained by Sala at the Catumbella River, and Monteiro found it to be abundant in the woods surrounding the town of Benguella. According to Anchieta it is called by the natives "Kitearia" at Capangombe, and "Bamba" in the Humbe district; Kellen found it abundant in the Upper Cunene district, and it is also generally distributed over German South-west Africa, where it has been procured at several places by Andersson and Fleck. The former naturalist writes: "This bird is pretty common in Damaraland and in the parts adjacent, including the Lake regions. In the neighbourhood of the Okavango I observed single individuals perched on the highest and most conspicuous boughs of trees, whence they would dart on passing winged insects; but in the other localities where I met with this species I found it associated in considerable flocks, which, when disturbed, moved leisurely to the nearest tree, rarely all at once, but one or two at a time, chattering incessantly whilst moving. These flocks frequent indiscriminately bush and forest, hopping about amongst the branches and foliage in search of insects. The flight of this species is straight, with a short, rapid, and quivering motion of the wings."

Sir Andrew Smith discovered the species near Latakoo in the Bechuanaland district of Cape Colony and wrote: "Owing to this bird being remarkably shy, specimens were at first procured with difficulty, though small flights of them were frequently observed; subsequently, however, it was remarked that where one chanced to fall wounded its companions continued hovering about and approaching until it was removed." T. E. Buckley found the species in Bamangwato and Matabeleland on two or three occasions, and once observed three or four together, "hawking after insects apparently, and returning to the same branch, like a Flycatcher." From Kanye, Dr.

Exton remarks that it "keeps much to the open forest and is very shy and wary." Messrs. T. Ayres and Jameson met with these Shrikes along the Limpopo and Tati rivers and Chubb found the species rare at Bulawayo, where the stomach of one examined contained beetles.

The eggs of this Shrike in the British Museum, taken by Andersson at Otjimbinque, have been described as "of a rather narrow oval shape and devoid of gloss. They are of a pale greenish-grey colour, spotted and blotched all over with greyish brown, slate colour and lavender." Average measurement 1.1×0.78 . Nehrkorn likens them in colouring to those of our House Sparrow, while Bucknill, describing an egg taken by P. Krantz at Matlabas in north-west Transvaal, writes: "Ground colour soft white with sub-surface splashings of transparent appearance of grey lilac and drab, and superficial over-splashes of pleasant olive-green, chiefly towards the obtuse end. Size 1.10×0.85 ."

The British Museum contains examples of this species from the following localities: *Transvaal*—Marico (Ayres); *S. Rhodesia*—Tati (Oates, Jameson and Buckley), Makalaka (Bradshaw), Bulawayo (Chubb), Hunyani River (Clark); *German S. W. Africa*—Otjimbinque (Andersson); *Angola*—Capangombe (Anchieta) and Katumbela (Sala).

Eurocephalus rueppelli.

Eurocephalus rueppelli, Bp. Rev. et Mag. Zool. 1853, p. 440 *Shoa*; Sharpe, Cat. B. M. iii. p. 280 (1877); Shelley, B. Afr. i. No. 689 (1896); Reichen. Vög. Afr. ii. p. 526 (1903); O.-Grant, Ibis, 1904, p. 267 *S. Abyssinia*; Erlanger, J. f. O. 1905, p. 689 *N. E. Afr.*; Witherby, Ibis, 1905, p. 519 *Somaliland*; Bannerman, Ibis, 1910, p. 304 *Somaliland*; p. 691 *Kilimanjaro*; Sjöstedt, Kilimandjaro-Meru Exped. i. p. 112 (1910); Koenig, Ber. V. Intern. Orn. Kongr., 1910, p. 511 *Mongalla*.

Eurocephalus anguitimens rueppelli, Neum. J. f. O. 1905, p. 215 *Shoa*.

Eurocephalus anguitimens (non Smith), Rüpp. Syst. Uebers. p. 53, pl. 27 (1845) *Shoa*.

Adult. Similar to *E. anguitimens*, from which it differs in having the upper back darker brown; upper tail-coverts, base of tail, abdomen and under tail-coverts white; sides of chest, flanks and thighs dark brown (these latter parts and the under wing-coverts are somewhat variable in their shade of colouring). "Iris dark brown; bill black; feet dark grey." Total length 9 inches, culmen to point of feathers 0.55, wing 5.0, tail 3.9, tarsus 0.9. Miessa, ♂, 2. 7. 02 (Degen). Female, wing 4.9, tail 3.7, Daro, 3. 12. 94 (Gillett).

Immature. Differ from adults in having the crown brown becoming creamy white on the nape, the back with obscure pale edges to the feathers and the wing-coverts, and inner secondaries edged with sandy buff; the ear-coverts are white and the forepart of the face black.

Rüppell's White-crowned Shrike ranges from north Nyasaland into southern Abyssinia, Somaliland and the upper White Nile Valley. They are very noisy, but shy birds; they pair for the breeding season, but at other times are to be met with in small parties of rarely more than twenty individuals, and they frequent well-foliaged trees in pursuit of their insect food.

In British Central Africa, near the northern end of Lake Nyasa, Sir Alfred Sharpe procured two specimens, which, like one of Sir John Kirk's from Ugogo, has the mantle, sides of the chest and under wing-coverts rather pale. The species is very generally distributed over German East Africa, where it has been obtained as far south as the Bengu and Ubena countries (Fülleborn) and at Iringo in Uhehe (Stierling). Böhm, who gives some notes on its habits (J. f. O. 1883, p. 185), records it from Igonda and Kakoma. At Kikombo in the Ugogo district Dr. S. T. Pruen found the species which is there known to the natives as the "Kungwepala." Mr. Oscar Neumann met with this Shrike at many places from the Pangani River into the Kavirondo country and found its nest at Kitoto, in the last-named district, on March 15. The nest was strongly constructed of grass-stalks covered with spiders' web and vegetable down, and

placed on a slender branch. The eggs, two in number, were white with clear and underlying spots of vandyke brown, and measured about 1.1×0.84 . From Somaliland Mr. Lort Phillips writes: "These birds are fairly numerous in the thickly wooded districts, their white rumps making them very conspicuous when on the wing. Early in March I watched a pair for some time busily engaged on a nearly-completed nest, which was, for such a large bird, a miracle of ingenuity. It was built almost entirely of spiders' webs, with a foundation of moss, and looked like a magnified nest of a Humming-bird. It was stuck against the side of a tallish tree, about 12 feet from the ground, and at a little distance could scarcely be distinguished from the bark." Two years later he writes: "On March 2 Bland brought in a nest of this species with the bird to which it belonged. The nest was similar to the one I found in 1895, being made entirely of spiders' webs, so closely matted together as to give it, at a little distance, the appearance of being made of clay. There were four eggs." In its northern range the species has been obtained at Miessa in Danakil and at the Hawash River (Degen). The type is one of Rüppell's specimens from Shoa, and other examples have been procured in that country by Ragazzi. Erlanger, who met with this bird everywhere during his extensive journeys in Somaliland and southern Abyssinia, also found two nests, one near Harrar, on March 16, with four eggs, and one in the Gurra country on April 8, also with four eggs. He gives a nearly similar description of both nest and eggs to those of Neumann and Lort Phillips. In the White Nile district, its most western range, Emin procured examples near Lado, and Heuglin met with it along the river to the south of 9° N. lat., while Koenig has recently recorded it from Mongalla, the most southern province of the Egyptian Sudan.

There are examples of this species in the British Museum from the following localities:—

Somaliland—Gedais (L. Phillips), Daro (Gillett), Waghar and Burao (Bury), Upper Sheikh (Hamerton); *Abyssinia* and *Shoa*—Billin and Miessa (Degen), Magois country (D. Smith); *Egyptian Sudan*—Lado (Emin); *British E. Africa*—Waso Nyro, Msara near Kenia, Lake Baringo (Delamere), Ukambani (Ansorge), Kibaradje on the Tana (Fischer), Duruma near Mombasa (Hildebrandt); *German E. Africa*—Kilimanjaro (Percival), Mamboio (Kirk); north of Lake Nyasa (Sharpe).

Genus II. NILAUS.

Bill greyish black, deeper than broad with a strong hook and a slight notch; nostrils exposed; no rictal-bristles. Wing less than 3·8 inches, pointed; primaries 3 and 4, about equal and the longest, 2 shorter than 6, 1 not half the length of 2 and much shorter than the secondaries. Tail nearly square and shorter than the wing. Tarsi with the sides and back finely scaled.

Type.

Nilaus, Swains. Zool. Journ. iii. p. 162 (1827). *N. brubru.*

The genus is confined to Tropical and South Africa and comprises six species.

KEY TO THE SPECIES.

- a.* A whitish eyebrow extending back to the side of the nape.
 - a*¹. A chocolate-coloured band down the side of the breast.
 - a*². Flank band broken up into a series of streaks; white of the wing and back strongly washed with buffy *afer.*
 - b*². Flank band continuous and confluent; white of the wings and back hardly showing any buffy wash *camerunensis.*
 - b*¹. Sides of breast bright cinnamon chestnut; little or no shade of buff on upper parts.
 - c*². Larger; wing about 3·5 inches *brubru.*
 - d*². Smaller; wing about 3·0 inches *minor.*
- b.* White eyebrow not extending back behind the eye.
 - c*¹. A broad chestnut band down each side of the breast *nigritemporalis.*
 - d*¹. Entire plumage black and white *affinis.*

Nilaus brubru.

Lanius brubru, Lath. Suppl. Indicis Orn. p. xx. (1801) *ex Levaill.*

Nilaus brubru, Shelley, B. Afr. i. No. 713 (1896); Stark and Sel. Bds. S. Afr. ii. p. 16 (1901); Reichen. Vög. Afr. ii. p. 538 (1903); Sharpe, Handl. B. iv. p. 302 (1903); W. L. Selater, Ibis, 1905, p. 113 *Victoria Falls*; Sparrow, J. S. Afr. Orn. Union, 1905, p. 11; L. E. Taylor, *ibid.* 1906, p. 66 *Irene*; Chubb, *ibid.* 1909, p. 68, *Khami River*; Swynnerton, Ibis, 1908, p. 48 *Gazaland*; Chubb, Ibis, 1909, p. 162 *Bulawayo*; Selater, Ibis, 1911, p. 284 *N.-E. Transvaal*.

Nilaus afer brubru, Neumann, J. f. O. 1907, p. 364.

Lanius capensis, Shaw, Gen. Zool. vii. p. 327 (1809) *ex Levaill.*

Nilaus capensis, Gadow, Cat. B. M. viii. p. 168, pl. 5, fig. 1 (1883).

? *Lanius frontalis*, Forst. Descr. Anim. p. 41 (1844).

Le Brubru, Levaill. Ois. d'Afr. ii. p. 85, pl. 71 (1799) *Orange River*.

Adult. Crown black; back of neck, back and scapulars mottled black and white; wings black, with nearly the whole of the median-coverts white, and three of both the greater-coverts and secondaries very broadly edged with white, forming a longitudinal wing-band, the primaries with only narrow incomplete white edges; under wing-coverts and broad inner margins to the quills white, with a dusky black patch on the coverts near the primaries; tail with the centre four feathers entirely black; the remainder with white tips and a white patch toward the middle of their outer webs, largest on the outer feathers; forehead and a broad eyebrow, extending back to the sides of the nape, white margined below by a black band beginning as a spot in front of the eye and widening out on the sides of the neck; under parts white, with a broad bright chestnut band on either side almost completely covering the sides of the breast; thighs mottled with black. Iris brown, bill and feet dusky slate-colour. Total length 5.75 inches, culmen 0.5, wing 3.35, tail 2.0, tarsus 0.9. Matabeleland, ♂, 29. 9. 73 (Buckley).

Female. Differs in having the black parts of the head and mantle dusky brown, and the pale portion of the mantle and wings slightly shaded with rufous buff, and sometimes the throat with some fine black streaks; wing 3.3. Otjimbingue, ♀ (Andersson). Young birds have the feathers of the head, upper tail-coverts, primary-coverts and the quills tipped with buff; under parts with distinct brownish black bars more or less numerous.

The Southern Brubru ranges southward from the interior of Benguella and the Zambesi at Victoria Falls to the Orange River, and Natal where it is very rare. In Mossamedes speci-

mens have been obtained at Huilla and Humbe by Anchieta, who gives its native name as "Kandilanakiuna," and by Kellen at Humpata and Gambos. To the south of the Cunene, Andersson writes: "This species is widely distributed, extending from the Okavango River on the north to Lake Ngami on the east, and the Orange River on the south. It is nowhere numerous, but is scarcer near the last-named river than in the other localities above referred to. Its usual resorts are forests or large trees, amongst which it hops about incessantly in search of insects. I do not think that I have ever seen more than a pair together." This Shrike has a low note somewhat resembling in sound the name Brubru, first given to this species which is the type of the genus *Nilaus*. It was discovered on the lower part of the Orange River by Levillant, who described the nest and eggs. He states that the nest was placed in the fork of an acacia tree, and constructed of moss and roots lined with wool and feathers. The eggs, five in number, are white with brown spots.

The species has not been recorded from south of the Orange River, but is spread over the rest of South Africa from Natal to the Victoria Falls of the Zambesi, and is, according to Mr. T. Ayres: "Pretty evenly distributed throughout the bush-country of south Central Africa." Mr. Guy Marshall writes from Mashonaland: "A generally distributed resident, but nowhere very common, being found singly or in pairs searching the trees for insects, in company with other small birds."

The nesting habits have been more recently described by Major Sparrow, who informs me that the nest which he found was taken by him at Waschbank in Natal on October 22, 1903. He writes: "The Shrike builds in the middle of October a nest in the fork of a camel-thorn or other tree, from fifteen to twenty feet from the ground. In external appearance it

resembles the nest of *Pachyprora molitor*, the White-flanked Flycatcher, but is larger and flatter, and is composed of the ends of small twigs and weeds strengthened by twine and cobwebs and covered externally with lichen. It is lined with lichen and leaf-stalks. The clutch consists of two eggs only, of a white ground colour covered and blotched all over with dark brown."

Swynnerton also obtained a nest in Mashonaland on October 20, which contained young birds. In this case it was about fifteen feet from the ground in the fork of a *Brachystegia* and was so small and so well assimilated to its surroundings as to be perfectly invisible except when the old bird was sitting on it. It was composed of a curious pale green-grey cement or felt intermixed only with a couple of *Brachystegia* leaves and lined scantily with two or three fine grasses. The stomach of the male, which was on the nest when discovered, contained beetles and a grasshopper.

Examples of this species in the British Museum from the following localities have been examined:—

Angola—Huxe in Central Benguella (Ansorge); *German S.W. Africa*—Otjimbinque and Swakop River (Andersson); *Bechuanaland*—Palapye (Jameson); *Cape Colony*—Maribogo near Mafeking (Woosnam); *Transvaal*—Potchefstroom (Ayres), Swaziland (Buckley), Klein Letaba (C. Grant); *Natal* (Seebohm and Cutter); *S. Rhodesia*—Shashi River (Buckley), Zambesi Falls (Bradshaw), Hunyani River (Clarke), Salisbury (Marshall and Swynnerton).

Nilaus minor.

Nilaus minor, Sharpe, P.Z.S. 1895, p. 479 *Okoto, Central Somaliland*; Shelley, B. Afr. i. No. 714 (1896); Sharpe, Handl. B. iv. p. 302 (1903); Ogilvie-Grant, Ibis, 1904, p. 266 *Oda*; Witherby, *t. c.* p. 519 *Bera*; Gurney, Ibis, 1909, p. 500 *Kibwesi*; Bannerman, Ibis, 1910, p. 303 *N. Somaliland*, p. 691 *Kilimanjaro*.

- Nilaus afer minor*, Reichen. Vög. Afr. ii. p. 540 (1903); Erlanger, J. f. O. 1905, p. 691 *Shoa and Somali*; Neumann, J. f. O. 1907, p. 362.
Nilaus afer erlangeri, Hilgert, Orn. Monatsb. 1907, p. 63 *Mane River, S. Somaliland*; Neumann, J. f. O. 1907, p. 363.
Nilaus afer massaicus, Neumann, J. f. O. 1907, p. 363 *Donje Erok, German E. Africa*; Sjöstedt, Kilimandjaro-Meru Exped. Vög. p. 112 (1910).

Male. Smaller, but otherwise similar to the adult of *N. brubru* in all its colouring, with the same amount and shade of chestnut on the sides of the body, but with the white wing band and mantle patches slightly washed with coffee-brown. "Iris brown; bill light brown; legs grey" (Degen). Total length 5.1 inches, culmen 0.65, wing 3.0, tail 1.9, tarsus 0.75. Okoto, type ♂, 8. 9. 94 (Donaldson Smith).

Female. Has the crown, back and wings dusky brown where it is black in the male, and is slightly smaller. Wing 2.9 inches. Gura (Gillett).

Immature. Resembles the female, but has the crown and back finely spotted with whitish, and the under parts transversely banded with narrow dusky bars; no chestnut on the flanks in very young birds.

The Lesser Brubru ranges from northern Somaliland and southern Shoa southwards to Kilimanjaro and the Natron Lakes.

The type was obtained by Donaldson Smith at Okoto on the Shebeili River in central Somaliland, and it has also been met with by the other Somaliland collectors, Lort Phillips, Hawker, Degen, Erlanger and Bury. The most northerly recorded locality appears to be Aruweina on the Zeila-Harrar road, where Pease collected an example.

In British East Africa it has been met with by Jackson, in whose collection there is a large series from various localities, also by Gurney in Kibwesi, by Neumann round the foot of Kilimanjaro, and by Schillings at Donje Erok.

Neumann recognizes three forms of this species as follows:—

Nilaus afer minor, in northern Somaliland from near Harrar to Berbera, and south to the Ogaden country.

Nilaus afer erlangeri, distinguished by its paler flank

stripes and slightly smaller size, wing 2·65 to 3·0 against 2·85 to 3·05 in *N. a. minor*. This form has only been obtained by Erlanger in south-central and south Somaliland at Kismayu.

Nilaus afer massaicus, larger than either of the others, wing 3·0 to 3·4; flank stripes darker. From Kilimanjaro in German East Africa to Kikuyu and Ukamba in British East Africa.

I have not been able to examine examples of the southern Somaliland race, but I find that nine males from British East Africa, chiefly from the Jackson collection, average 3·05 (extremes 2·8 to 3·2), while six from Somaliland average 3·0 (extremes 3·0 to 3·1). I see myself, therefore, no ground for separation of the two forms.

Pease noticed the Lesser Brubru in the upper branches of high trees, where it searches for its food, and is generally solitary; Hawker found that it was common, and had a variety of calls, and was a good runner.

Jackson discovered a nest at Kibwesi on March 6, partially built; after waiting a few days to allow the birds to finish building and lay the eggs, he secured them. The nest, about 3 inches in diameter, was neatly made of lichen and lined with fibre, and was placed on the branch of an acacia tree at a height of 25 feet. It was not unlike that of an English Chaffinch. The eggs, two in number, were of a dark grey stone-colour, rather sparingly spotted with black, and with larger spots of dark brown shading into the ground colour at their edges.

Erlanger also found the nest of this species in the Gura country of Somaliland on April 8; it contained two eggs. He gives a very similar account to that of Jackson, also remarking on the similarity of the nest to that of the Chaffinch. In this case the eggs measured $0\cdot72 \times 0\cdot60$.

The British Museum contains examples of this species from the following localities:—

Somaliland—Okoto (D. Smith, type), Gura (Gillett), Lehilla (Stanford), Ujawaji (Hawker), Sogsoda (L. Phillips), Burao and Wagar (Bury), Aruweina (Pease); *Shoa* and *S. Abyssinia*—Oda between Harrar and Hawash (Degen), near Lake Stephanie, and Hamar near Lake Rudolf (Zaphiro); *British East Africa*—Athi River and Waso Nyiro (Delamere), Lake Baringo (Jackson), Teita (Harvey); *German East Africa*—Kilimanjaro (Percival).

In Mr. Jackson's collection there are, in addition, examples from Waso Nyiro, Donya Narok, Mawarasha Hill, Likamba and Simba River, all in British East Africa.

Nilaus afer.

Lanius afer, Lath. Suppl. Indicis Orn. p. xix. (1801) *Senegal*.

Nilaus afer, Gadow, Cat. B. M. viii. p. 169, pl. 5, fig. 2 (1883); Shelley, B. Afr. i. No. 712 (1896); Reichen. Vög. Afr. ii. p. 539 (1903); Sharpe, Handl. B. iv. p. 302 (1903); Ogilvie-Grant, Ibis, 1904, p. 266 *Goubéré*; 1907, p. 590 *Sobat*; A. L. Butler, Ibis, 1905, p. 329 *Sudan*; Erlanger, J. f. O. 1905, p. 691 *S. Abyssinia*; Koenig, Ber. V. Intern. Orn. Kongr. 1910, pp. 511, 536 *Sudan*; Reichen. Mittl. Zool. Mus. Berl. v. p. 222 (1911) *Cameroon*.

Nilaus edwardsi, Rochbrune, Bull. Soc. Philom. (7) vii. p. 166 (1883) *Senegambia*.

Subspecies a.—*Nilaus erythræa*.

Nilaus afer erythræa, Neumann, J. f. O. 1907, p. 361 *Ailet*; Zedlitz, J. f. O. 1910, p. 796 *Eritrea*.

Subspecies b.—*Nilaus hilgerti*.

Nilaus afer hilgerti, Neumann, J. f. O. 1907, p. 362 *Kassim River*.

Similar in all its stages of plumage to *N. brubru*, from which it is distinguished in having no black in front of the eyes; eyebrows, pale portion of the upper back and the wing washed with rufous-buff, and the brown bands down the sides of the body narrower, more broken up, and darker chocolate, not cinnamon-brown. "Iris dark brown, bill black, with base of lower mandible pale, feet bluish-grey" (Witherby). Total length 5·4 inches, culmen 0·6, wing 3·0, tail 2·2, tarsus 0·85. Gimbar (Esler).

The female nearly always has a sooty-brown, not black, head.

A young bird is dusky-brown above, the head and back spotted with white, below white, narrowly and irregularly transversely banded with dusky, and with no traces of the chocolate flank bands. Kiri, N. Nigeria (Alexander).

The Northern Brubru ranges from Senegambia and the Gold Coast eastwards to the Red Sea.

The type of the species and that of *N. edwardsi* both came from Senegal. Neumann in his recent revision of the Bush-Shrikes recognized two local races in addition to the type as follows:—

Nilaus afer afer, with only a few separate flank stripes. Type from Senegal. Distribution from Senegal and Togoland to the Nile Valley as far north as Maghavr, north of Khartum, where it was obtained by Koenig.

Nilaus afer erythraea, with the flank-stripes broader and more numerous, the white portions between washed with yellowish. Type from Ailet near Massaua in Eritrea. Distribution—Bogosland and Eritrea.

Nilaus afer hilgerti, with the flank stripes still broader and running into one another almost to form patches. Type from the Kassim River in Shoa. Distribution—Southern Abyssinia and Shoa to Lake Zwai.

The large series in the British Museum show that it is possible to distinguish these three forms, though the distinctive characters are by no means clearly marked or constant.

In Senegambia, Marche and De Compiègne collected specimens at Daranka and at Zinghinchor close to Casamanse, where Verreaux likewise procured the species; Dr. P. Rendall met with it only on one occasion during his residence at Bathurst on the Gambia. In the Gold Coast Colony, the only specimen I saw was perched on the top of a high tree in

the open country at Quamin-fio, some ten miles from Accra. Alexander, who met with the species near the Volta River and at Gambaga, writes (Ibis, 1902, p. 311): "This Shrike is not common, and is generally seen singly or in pairs. It is very active, and runs along the branches and limbs of trees after the manner of a Nuthatch." He also remarks that the adult females have the crown brown, which is a sign of immaturity in the other sex. Subsequently he obtained a large series of these birds in various localities in northern Nigeria especially near Lake Chad. In Togoland it has been obtained at Bismarckburg, Kratshi, and Jaunde.

The species is generally distributed over the Nile and Abyssinian districts from the Albert Nyanza to Khartum and Eritrea, and is replaced in Uganda and Somaliland by *N. minor*.

Emin procured specimens at Lado and Fadjulli. Mr. A. L. Butler met with it at twenty miles west of Omdurman, and on Jebel Melbis in Kordofan, and writes: "Nowhere abundant, but I have come across it singly or in pairs along the White Nile generally, and as far west as El Obeid in Kordofan. This Bush-Shrike is a bird of unobtrusive habits, and spends most of its time quietly searching branches and foliage for its insect food. In its actions it reminds me very much of the genus *Tephrodornis*. Its note is a clear and somewhat ventriloquistic whistle." Mr. H. F. Witherby writes: "We only observed this bird between Jebel Auli and Gerazi, from twenty-five to sixty miles south of Khartum. In that district it was not uncommon. This was one of the few species found breeding. The sexual organs in the specimens preserved were in an advanced condition, and I watched a pair building a nest on May 1. It was placed in the fork of a horizontal bough about 30 feet up a sont-tree in a thick wood. Both birds worked at building, bringing material at intervals of a

minute, and often less, during the considerable time I watched them. They invariably sat in the nest and turned rapidly round in it as they built in the stuff which they had brought. I saw one of the birds plastering cobwebs on the outside. The male, and possibly the female also, had a quiet piping note of one syllable." This note, Mr. Hawker observes, "can be heard at some distance." Heuglin met with the species in Kordofan, and in Abyssinia to as far north as Keren and Lebka on the Anseba River, 16° N. lat. Blanford's specimens came from Waliko, Rairo and Ailet, and at this last-named place others have been obtained by Esler, who also procured at Gimbar a fine adult male which was formerly in my own collection and is now in the British Museum. In Shoa, Antinori procured a single specimen at Dambi, and Ragazzi a pair at Cialalakan and a third at Soddé. In southern Abyssinia Lord Lovat met with it on two occasions only, at the Kassim River and at Wama. Mr. E. Degen obtained a specimen at Goubrière near Lake Tsana, and Erlanger's last collection contained three specimens from Filoa and the Maki River near the southern boundary of Shoa. The eggs which have not yet been described are, we may presume, similar to those of *N. minor*.

Examples of this species in the British Museum from the following localities have been examined:—

N. a. afer: *Gambia* (Burton); *Portuguese Guinea*—Gunnal (Ansorge); *Gold Coast Colony*—Accra (Shelley), Volta River, Gambaga and Kintampo (Alexander); *N. Nigeria*—Serikim Kudu, Kiri, Bina, Bauchi, Gendie and Lake Chad (Alexander); *French Congo*—Fort Lamy and Ubangi River (Alexander); *Egyptian Sudan*—Nakheila (Rothschild), Gerazi (Witherby), Kaka and Fashoda (Hawker), Renk and Baro river (Zaphiro), Zeraf River (Dunn).

N. a. erythræ: *Eritrea*—Gimbar and Eylet (Esler), Waliko (Jesse), Ailet and Rairo (Blanford).

N. a. hilgerti: Abyssinia—Kassim River and Wama (Lovat), Goubéré (Degen), Lake Zwai and Lake Koya (Zaphiro).

***Nilaus camerunensis*.**

Nilaus afer camerunensis, Neumann, J. f. O. 1907, p. 364 *Jaunde*;

O.-Grant, Trans. Zool. Soc. xix. p. 336 (1910) *Ruwenzori*.

Nilaus minor (non Sharpe) O.-Grant, Ibis, 1905, p. 902 *Mulema*.

Nilaus nigritemporalis, Jackson (non Reichen.), Ibis, 1906, p. 553 *Toro*.

Male. Resembling most closely *N. minor*, but larger and with the flank bands a darker chocolate brown, not cinnamon; the mantle patches and the wing bands are faintly washed with buffy as in *N. minor*; from *N. afer* it differs in having the flank bands continuous, not broken up into separate streaks. Iris hazel; bill black, grey about base; feet dark slate. Length 5.75 inches; wing 3.15; tail 2.0; culmen 0.60; tarsus 0.80. Ruwenzori (Ruwenzori Exped.).

The female resembles the male except that the black of the upper parts is replaced by dusky brown. Young birds have the crown and wings spotted with whitish and the under parts narrowly banded with dusky and at first very little chocolate on the flanks. Later on the males resemble the females, but have the mantle patch a deeper tawny and a few fine streaks of dusky on the throat.

The Camaroon Brubru was described by Neumann from a single female specimen from Jaunde in Camaroon. To this form Ogilvie-Grant has referred with some hesitation a series of Brubrus collected at Mokia on the south-eastern slopes of Ruwenzori by the members of the recent expedition; and without doubt Doggett's specimen from Mulema in Uganda and the two young birds from Toro referred to *N. nigritemporalis* by Jackson are identical with the Ruwenzori examples. This identification cannot be definitely settled until further specimens are obtained from Camaroon.

Woosnam states that this species is not uncommon throughout the acacia country around the south end of Ruwenzori and in the Semliki valley.

The British Museum contains four males, three females

and two young birds from Ruwenzori, and one male from Mulema (Doggett).

Nilaus nigritemporalis.

Nilaus nigritemporalis, Reichen. J. f. O. 1892, pp. 36, 218 *Ngoma*; Shelley B. Afr. i. No. 715 (1896); Stark and Schl. Birds S. Afr. ii. p. 17 (1901); Reichen. Vög. Afr. ii. p. 541 (1903); Sharpe, Handl. B. iv. p. 302 (1903); Stoehr and Schl. J. S. Afr. Orn. Union 1906, p. 94 *N. E. Rhodesia*; Neave, Manch. Mem. li. No. 10, p. 76 (1907) *N. E. Rhodesia*; Sheppard J. S. Afr. Orn. Union 1909, p. 29 *Beira*; Neave, Ibis 1910, p. 229 *Chambezi valley*.

Nilaus afer nigritemporalis, Neumann, J. f. O. 1907, p. 365.

Adult. Similar to *N. brubru*, from which it differs in the white eyebrow not extending back behind the eye, the entire upper half of the sides and back of the neck being black or brown like the crown; less rufous on the side of the body, this colour being often broken up or forming a broad band with white on each side. "Iris hazel; bill and feet dark lead-grey." Total length 5·5 inches, culmen 0·65, wing 3·3, tail 2·0, tarsus 0·9. Zambesi, ♂, 7. 10. 98 (Alexander), ♀, wing 3·3, Mpimbi (A. Sharpe).

Immature. Like those of *N. brubru*, and no other member of the genus in having black streaks on the throat. The very young birds have no rufous on the sides of the body.

The Black-browed Brubru ranges from the Zambesi below the Victoria Falls and from the Beira district northward to the Pangani River and the Unyamwesi country of German East Africa. Alexander, who met with this species on the Zambesi below its junction with the Kafue, writes: "By no means common. Our four specimens were obtained on high ground clothed with the tree *Copaifera mopane*. A male obtained on October 7 had breeding-organs much developed, while on December 31 a nestling was procured. The call-note is a loud whistle." The species has been obtained at Zomba (Whyte), Tanganyika Plateau (Manning), Idunda (Fülleborn), Malangali (Marwitz), Songea (Stierling), Kakoma (Böhm), Usaramo (Fischer). Of all these naturalists and travellers in E. Africa, Böhm (J. f. O. 1883, p. 181)

alone gives us any notes on its habits. These apparently closely resemble those of the other members of the genus in frequenting, in pairs or singly, the well foliated trees in pursuit of their insect food, where their presence is often betrayed by their piping note. The nest and eggs of this species have not yet been recorded.

Neave obtained only one specimen in the Chambezi valley of N. E. Rhodesia, where he states that it is a rare bird.

The type was obtained by Stuhlman at Ngoma in the Unyamwesi country of German East Africa, and this appears to be its most northern recorded limit, while to the south Sheppard found it not uncommon in the Beira district.

There are examples from the following localities in the British Museum. *N. E. Rhodesia*—Zambesi between Zumbo and the Kafue (Alexander), Chambesi valley (Neave), Fife (Manning); *Portuguese E. Africa*—Chicowa (Alexander); *Nyasaland*—Zomba (Whyte), Mpimbe and Milanje (Sharpe).

Nilaus affinis. (Pl. 56, fig. 1.)

Nilaus affinis, Bocage, Journ. Lisb. 1878, pp. 204, 213, *Caconda*; Gadow, Cat. B. M. viii. p. 170 (1883); Shelley, B. Afr. i. No. 716 (1896); Reichen. Vög. Afr. ii. p. 542 (1903); Sharpe, Handl. B. iv. p. 302 (1903).

Nilaus afer affinis, Neumann, J. f. O. 1907, p. 366.

Adult.—Entire plumage black and white, with no rufous on the sides of the body, otherwise similar to *N. nigritemporalis*, with the same amount of black and white on the head and neck. "Iris brown; bill black; feet slaty grey." Total length 6·0 inches, culmen 0·6, wing 3·4, tail 2·0, tarsus 0·85. *Caconda*, ♂, 9. 5. 78. (Anchieta).

The White-flanked Brubru ranges from Benguella possibly to Lake Nyasa and Lake Tanganyika.

In Benguella the species was discovered by Anchieta at *Caconda*, where according to his notes it was known to the



Nilaus affinis.
Eurocephalus anguitemens ♂

natives as the "Caxingo-anguluvi," "Kitikenene" and "Quitiaquenene," and at Galanga as the "Culumbamba."

The only authority I find for its ranging eastward rests on two specimens from Songwe (Fülleborn) described by Dr. Reichenow as immature birds of this species, and he further suggests that a bird from Lugoma (Böhm) possibly also belongs to this species. I am inclined to doubt both of these latter localities (Songwe and Lugoma) for the present species, for I think that the specimens, immature birds, more probably belong to *N. nigritemporalis*.

The British Museum contains only two examples of this species from Caconda, the type locality, collected by Anchieta; but in the Tring Museum there are others from Bihé, the Karunge River, Duque de Braganza, Makwata and Pungo Andongo, all places in central Angola where it was collected by Ansorge.

Genus III. SIGMODUS.

Bill red or orange in adults, moderately strong, with the upper mandible strongly hooked and with a notch near the end. Nostrils horizontal with a slight overhanging membrane, nearly or entirely covered by the bristly frontal plumes, which form a slight crest. Eyelids generally very wide and provided with small fleshy wattles of a yellow, red or dusky grey colour. Wing fairly long, but rounded, the secondaries falling short of the tip of the wing by less than the length of the tarsus; primaries fourth and fifth longest, second equal to tenth and first more than half of second. Tail slightly rounded and shorter than the wing. Tarsus scaled behind, and orange or scarlet like the feet.

Type.

Sigmodus, Bp. Consp. i. p. 365 (1850) *S. caniceps*.

The genus is confined to Tropical and South Africa, and comprises ten species and subspecies. Its members may be easily recognized by the red bill and legs of the adults.

KEY TO THE SPECIES.

- a.* Portion of head white, grey or chestnut.
- a*¹. Forehead white or grey; crop white.
- a*². Chest white; abdomen rufous buff; chin, cheeks and ear-coverts black in adults.
- a*³. Blue grey of the head not reaching below the eye. *caniceps*.
- b*³. Blue grey of the head completely encircling the eye. *harterti*.
- b*². Chest rufous like the abdomen; chin, cheeks and ear-coverts bluish grey.
- c*³. A larger grey chin-patch; front of head whiter. *rufiventris*.
- d*³. A smaller grey chin-patch; front of head greyer. *mentalis*.
- b*¹. Forehead chestnut; crop dusky grey like the breast. *scopifrons*.
- b.* Head and neck black.
- c*¹. A broad oblique white band on under surface of wing quills.
- c*². Mantle blackish brown.
- c*³. Mantle browner; wing 5·1. *retzii*.
- f*³. Mantle blacker; wing 5·3. *nigricans*.
- d*². Mantle more drab-brown.
- g*³. Mantle darker; wing 5·2. *intermedius*.
- h*³. Mantle paler; wing under 5·0. *tricolor*.
- d*¹. No white band on the under surface of the quills. *graculinus*.

Sigmodus caniceps.

Sigmodus caniceps, Bp. Consp. i. p. 365 (1850) *Butri River*; Jard. Contr. Orn. 1852, p. 139, pl. 94; Sharpe, Cat. B. M. iii. p. 323 (1877); Shelley, B. Afr. i. No. 667 (1896); Reichen. Vög. Afr. ii. p. 537 (1903); Sharpe, Handl. B. iv. p. 274 (1903); Kemp, Ibis, 1905, p. 235 *Sierra Leone*.

Subspecies a.—*Sigmodus harterti*.

Sigmodus caniceps harterti, Neumann, Bull. B.O.C. xxi. p. 70 (1908) *Degama, S. Nigeria*.

Adult. The feathers of the forehead and in front of the eyes are somewhat bristly and directed forward, and are bluish-white like the crown; remainder of the head, the neck, back, wings and tail black, with a greenish gloss strongest on the mantle, and a broad white band crossing the inner webs of the nine longer primaries forming an oblique band across the wing when seen from below; crop and chest pure white shading into pale rufous

buff on the abdomen, thighs and under tail-coverts; axillaries and sides of the chest black. Iris yellow; bill, tarsi, feet and claws orange red. Total length 8.2 inches, culmen 1.0, wing 4.7, tail 3.3, tarsus 0.8. Cape Coast Castle, ♀, 4. 3. 72 (Shelley). Baumann gives eyelids and bill purplish-red; legs scarlet-red.

Immature. Differ in having the bill black or partly so; the crown mottled with black on the hinder half; a black band through the eye to the nostril; chin and throat whitish shading into rufous buff on the cheeks, ear-coverts and sides of neck; one or two of the outer pairs of tail-feathers with sandy buff terminal angular marks. Fumsu (Alexander).

S. c. harterti. "Resembling the typical form, but smaller, and with the blue-grey of the head completely encircling the eye. Wing 4.1 to 4.3, culmen 0.80 to 0.85." Neumann.

The Western Red-billed Shrike ranges from Sierra Leone into southern Nigeria.

The type of this species is stated by Hartlaub to have been obtained on the Boutry or Butri River on the Gold Coast by Pel. There are several examples in the British Museum from Sierra Leone.

Demery met with this species at the Sulemah River, and it has been recorded from many places in Liberia, where Oberholser informs us that it is called by the British residents the "Baboon-bird," and by the natives the "Way-ye." From the Gold Coast there are in the British Museum eleven adults and nine immature birds, and when I was out there with T. E. Buckley, in February and March, we saw a few solitary examples, and one on Connor's Hill only a few hundred yards from Cape Coast Castle. They appeared to be sluggish in their movements. Alexander met with the species at Fumsu, and along the Volta River, and writes: "This bird frequents the forest in small parties. It is not found in the Hinterland." In Togoland it has been recorded from Agome Tongwe and Amedjovhe (Baumann).

Neumann distinguishes birds from southern Nigeria by their smaller size, and by the greater extension of the grey cap. He states that he has examined some eighteen examples

of this form in the Tring Museum from Degama, Gregani and Oguta, collected by Ansorge, and from Amambara Creek, collected by Braham.

There are examples of this species from the following localities in the British Museum.

Sierra Leone—Bo (Kemp); *Gold Coast Colony*—Fantee (Ussher, Hickman, Aubinn), Cape Coast Castle (Buckley, Shelley), Denkera (Ussher), Ashantee (Lagden, Beddington), Fumsu and Volta River (Alexander).

Sigmodus rufiventris.

Sigmodus rufiventris, Bp. Rev. et Mag. Zool. 1853, p. 441 *Gaboon*; Sharpe, Cat. B.M. iii. p. 323 (1877); Oust. N. Arch. Mus. (2) ii. 1879, p. 134, pl. 5, fig. 1; Shelley, B. Afr. i. No. 668 (1896); Reichen. Vög. Afr. ii. p. 537 (1903); Sharpe, Handl. B. iv. p. 274 (1903); id. Ibis, 1908, p. 328 *Cameroon*; Bates, Ibis, 1909, p. 33; Reichen. Mitt. Zool. Mus. Berl. v. p. 82 (1910) *Rio Benito*.

Adult. Similar to *S. caniceps* in the colouring of the upper parts, and in the neck being entirely black; but differs in the ear-coverts, cheeks and chin being bluish-grey, and the grey of the head fading into white towards the bill; crop pure white; chest, abdomen, thighs and under tail-coverts cinnamon with a little black on the sides of the chest. "Iris ochre yellow, eyelids fleshy-red; bill and feet carmine-red" (Reichenow). Total length 8·5 inches, culmen 0·6, wing 4·5, tail 3·0, tarsus 0·7. Zima country, ♂, 12. 10. 05 (Bates). The female is similar; wing 4·5. River Ja, ♀ (Bates).

The young bird resembles that of *S. caniceps* in having the crown white fading into black on the occiput, which is continued forward as a black band through the eye to the base of the bill; below the chin, throat and crop, are white with a little wash of buffy on the throat; the abdomen is cinnamon as in the adult; bill black. River Ja (Bates).

The Gaboon Red-billed Shrike ranges from Cameroon to Portuguese Congo.

The type was brought to the Paris Museum by Dr. Franquet from Gaboon, and was figured by Oustalet. The species was first obtained in Cameroon by Zenker at Jaunde, and subsequently by Bates. The latter writes as follows;—

"The birds of this genus have a strange appearance, which is heightened by the yellow iris, and have also strange ways. They go about in bands of half-a-dozen, flitting, one at a time, from one tree-top to another; they have peculiar cries, and make a loud snapping noise, which sounds as if made with the bill. They show little fear, and are easy to shoot. They are not common, and as they always attract attention when seen, and are remembered as peculiar, I believe I can count up the times that I have seen them. Sometimes they have been met with in the big forest, sometimes in the second-growth trees, but never very near a village."

The British Museum contains examples of this species from the following localities: *Camaroon*—River Ja, Efulen and Zima country (Bates); *French Congo*—Gaboon (Verreaux and Walker), Moonda River (Du Chaillu); *Portuguese Congo*—Loango (Lucan).

Sigmodus mentalis. (Pl. 57, fig. 2.)

Sigmodus mentalis, Sharpe, Journ. Linn. Soc. Zool. xvii. p. 425 (1884) *Sassa*; Shelley, B. Afr. i. No. 669 (1896); Reichen. Vög. Afr. ii. p. 538 (1903); Sharpe, Handl. B. iv. p. 274 (1903).

Sigmodus griseimentalis, Sharpe, Ibis, 1884, p. 359 *nom. nud.*

Sigmodus rufiventris mentalis, Neumann, Ornith. Monatsb. 1899, p. 89.

Adult. Similar to *S. rufiventris*, from which it differs in having only a few feathers of the chin bluish-white, the rest black, the head bluer and less inclining to white towards the bill and the cinnamon brown of the lower parts darker and richer; bill dark pink coral; feet red. Total length 8.5 inches, culmen 0.70, wing 4.7, tail 3.1, tarsus 0.7. Type, *Sassa*, Oct. (Bohndorff).

Bohndorff's Red-billed Shrike inhabits the northern watershed of the Congo.

The type, which is now in the British Museum, was discovered in the *Sassa* country of the north-east corner of the Belgian Congo, by Bohndorff, and other specimens

have been obtained by Emin at Irumu on the Ituri River, to the west of Lake Albert, and at Nsangassi by Stuhlman between Lakes Albert and Albert Edward.

The Red-billed Shrike obtained by Dybowski on the Ubangi River (Oustalet, *Naturaliste*, 1893, p. 127) should also probably be referred to this species, which is hardly more than a subspecies of *S. rufiventris*.

Sigmodus scopifrons.

Sigmodus scopifrons, Peters, J. f. O. 1854, p. 422 *Mozambique*; Sharpe, Cat. B. M. iii. p. 324 (1877); Shelley, P. Z. S. 1881, p. 582, pl. lii, fig. 1; id. B. Afr. i. No. 670 (1896); Reichen, Vög. Afr. ii. p. 537 (1903); Sharpe, Handl. B. iv. p. 274 (1903); C. Grant, Bull. B. O. C. xxi. p. 66, 1908 *Beira*; Sheppard, J. S. Afr. Orn. Union 1909, p. 30, 1910, p. 42; W. Selater, Ibis, 1911, p. 291 *Masambeti*.

Adult. A frontal patch of short, upright, bristly plumes extending back in a line with the centre of the eyes, bright chestnut, followed by a broad band of dark slate colour; remainder of head dull black fading into dusky ashy grey on the neck, back, inner wing-coverts and breast: remainder of wings black, with a moderately broad band of white across the inner webs of the nine longer primaries, forming an oblique band on the lower surface of the wing; tail black with a small white terminal spot on the centre pair of feathers and white ends to the others, increasing in size toward the outer ones; the dusky grey of the breast and thighs fades into pure white on the lower abdomen and under tail-coverts. Iris bright yellow with a narrow outer ring of blood-orange, wattles round the eye dark glossy slate-coloured, bare skin behind whitish; bill dark tomato-red, slightly yellow at the tip; legs and toes orange, claws horny. Length 7·0 inches, wing 3·9, tail 3·0, culmen 0·6, tarsus 0·7. Masambeti, ♀, 10. 11. 06 (C. Grant).

Some of the specimens in the British Museum have a band of white across the top of the head behind the frontal patch, as shown in Shelley's plate. These are perhaps males, but the specimens are not sexed.

The Chestnut-fronted Red-billed Shrike ranges from the Beira district, south of the lower Zambesi to Lamu in British East Africa.

It was discovered by Dr. Peters in Mozambique, and has also been met with by Fischer at Lindi and in the Nguru Hills, and

by Kirk in the Usambara Hills and at Mamboio, all in German East Africa, and by the last named at Lamu in British East Africa.

Claude Grant has recently found it south of the Zambesi in the Beira district. He writes: "I have only once seen this species, when a flock of six individuals were observed in the tops of some trees in a strip of forest near the Masambeti stream. In cry and habits it resembles *S. tricolor*, and it was only when I had picked up the specimen shot that I discovered that it was different." P. A. Sheppard, who has also met with it in the Beira neighbourhood, writes: "Its habits are very similar to those of *S. retzii*; it keeps to the higher trees, and with very feeble flight travels from one to another. I have only seen this species in thickly wooded districts. I found small insects in the stomach of those shot. It appears to be a migrant, as I have not seen one for at least two months." Subsequently he found a nest on November 14. It was saddled on a fork towards the extremity of a bough about 15 feet from the ground in a tree in open wood and closely resembled the nest of *Dryoscopus cubla*. It contained three young birds just hatched. These were being fed by three old birds, one of which was shot and proved to be a young male. This is certainly a most remarkable occurrence, though perhaps it may be explained by the strictly social habits of all the birds of this genus.

The British Museum contains examples from the following localities: *Portuguese East Africa*—Masambeti near Beira (C. Grant); *German East Africa*—Mamboio (Kirk); *British East Africa*—Lamu (Kirk).

Sigmodus retzii.

Prionops retzii, Wahlb. Oefv. K. Vet. Akad. Förh. Stock. 1856, p. 174
Doughe river.

Sigmodus retzii, Sharpe, Cat. B. M. iii. p. 324 (1877); Shelley, B. Afr. i. No. 671 (1896); Stark and Schl. Bds. S. Afr. ii. p. 48 (1901); Reichen. Vög. Afr. ii. p. 534 (1903); Sharpe, Handl. B. iv. p. 274 (1903).

Subspecies a.—Sigmodus nigricans.

Sigmodus retzii nigricans, Neum. Orn. Monatsb. 1899, p. 90 *N. Angola*; Reichen. Vög. Afr. ii. p. 535 (1903).

Sigmodus nigricans, Sharpe, Handl. B. iv. p. 274 (1903).

Sigmodus tricolor (non Gray), Neave, Ibis, 1910, p. 225 *Katanga*.

Subspecies b.—Sigmodus intermedius.

Sigmodus retzii intermedius, Neum. Orn. Monatsb. 1899, p. 90; id. J. f. O., 1900, p. 275 *Muanza*; Reichen. Vög. Afr. ii. p. 535 (1903).

Sigmodus intermedius, Sharpe, Handl. B. iv. p. 275 (1903).

Subspecies c.—Sigmodus tricolor.

Prionops tricolor, Gray, P. Z. S. 1864, p. 45 *Tete*.

Sigmodus tricolor, Sharpe, Cat. B. M. iii. p. 325 (1877); Shelley, B. Afr. i. No. 672 (1896); Stark and Selater, Bds. S. Afr. ii. p. 50 (1901); Sharpe, Handl. B. iv. p. 275 (1903); Stoeck and Selater, J. S. Afr. Orn. Union, 1906, p. 96 *N.-E. Rhodesia*; Neave, Man. Mem. li. No. 10, p. 71 (1907) *N.-E. Rhodesia*; Sheppard, J. S. Afr. Union, 1909, p. 29 *Beira*; Selater, Ibis, 1911, p. 291 *Portuguese E. Africa*.

Sigmodus retzii tricolor, Reichen. Vög. Afr. ii. p. 535 (1903); Swynerton, Ibis, 1908, p. 63 *Gazaland*; Sjöstedt, Kilimandjaro-Meru Exped. i. p. 112 (1910).

Subspecies d.—Sigmodus graculinus.

Prionops graculinus, Cab. J. f. O. 1868, p. 412 *Mombasa*; id. in Decken Reis. iii. p. 24, pl. 3 (1869).

Sigmodus graculinus, Sharpe, Cat. B. M. iii. p. 325 (1877); id. Handl. B. iv. p. 295 (1903); Bannerman, Ibis, 1910, p. 691 *Kilimanjaro*.

Sigmodus retzii graculinus, Reichen. Vög. Afr. ii. p. 536 (1903); Erlanger, J. f. O. 1905, p. 691 *S. Somaliland*.

Adult. Head, neck, and breast black with a greenish gloss; back, scapulars and wing-coverts deep blackish-brown; wing quills and tail slightly more dusky; tail with the central feathers showing hardly any white, the others with white tips, increasing in size towards the outer feathers; abdomen and under tail-coverts white; a broad white bar on the inner webs of the primaries, forming a conspicuous oblique band on the under side of the

wing. Iris yellow, eyelid and wattle red, bill red, yellow at the tip, feet red. Length 8.5 inches, wing 5.1, tail 3.8, culmen 0.65, tarsus 0.9. Oliphant River, ♀, 7. 85 (W. Ayres).

Immature. Has the head and under parts brown like the back. Oliphant Vlei (Andersson). A still younger bird has a narrow white terminal barring to the feathers above and below, giving it a mottled appearance, and broad whitish ends to some of the wing-coverts; the bill is dusky. Gazaland (Swynnerton).

S. r. nigricans. Differs from *S. retzii* only in the much greyer and more slaty shade of the back and wing-coverts. Wing 5.35. Maconjo (Anchieta).

S. r. intermedius. "Differs from *S. retzii* in the paler and more hair brown colour of the back and wing-coverts. Wing 5.20." Neumann.

S. r. tricolor. Differs from *S. retzii* and *S. r. intermedius* in the still paler brown colour of the back and in its smaller size. Wing 4.7. Tete (Kirk).

S. r. graculinus. Differs from all the other subspecies in the absence of the white on the inner webs of the wing feathers; colour of the back and wings even paler than in *S. r. tricolor*. Wing 4.9. Mombasa (Wakefield).

The typical form of this species was discovered by Wahlberg on the Doughe, or, as it is now called, the Okavango River. It is found throughout the northern part of Bechuana-land and extends eastwards into Mashonaland, where it merges into *S. r. tricolor*.

S. r. nigricans takes the place of the typical form in Angola. Neumann's description is based on examples obtained at Malange, north of the Quanza, and he confines his subspecies to this region, but Reichenow extends its range to Loanda in the north, to Benguella in the south, and the Congo region in the west. Examples from Maconjo, in Benguella, and from Humbe, in Mossamedes, as well as two specimens from Katanga, obtained by Neave, all in the British Museum, seem undoubtedly referable to this form.

S. r. intermedius was founded by Neumann on an example collected by himself at Muanza, on Lake Victoria, and, according to him, is distributed all over the country between that lake and Tanganyika. I have seen no examples of this form.

S. r. tricolor takes the place of the typical form in Portuguese East Africa, North-east Rhodesia, Nyasaland and German East Africa. The type was obtained by the Livingstone Expedition at Tete on the Zambesi.

S. r. graculinus replaces *S. r. tricolor* in British East Africa, from the Pangani River, Kilimanjaro and Kavirondo, north and east to the lower valley of the Juba River, where it was obtained by Erlanger. In the Usambara Mountains and about Kilimanjaro forms intermediate between *S. r. tricolor* and this subspecies are frequently met with, as well as typical examples of both races. The type of the subspecies was obtained many years ago near Mombasa by Baron von der Decken.

Andersson, who collected two examples of this species at Oliphant Vlei in Damaraland, writes: "When encamped in the desert a few days journey south of the Okavango, I for the first and only time observed this fine Shrike. The flock consisted of six individuals, an adult male and female and four young birds of both sexes, all of which I secured after much running and dodging. They were exceedingly wary and watchful, always perching on the loftiest and most exposed trees, in which respect they differed from *P. talacoma*, though they resembled it in the manner in which they were feeding when I first saw them."

Ayres gives a somewhat similar account of their habits, adding that their flight is heavy and somewhat slow, their notes loud, chattering and harsh, and that they feed on insects.

Swynnerton states that in Gazaland the Chindao name is Mariganyama and that they are not infrequent in the open woods about Chirinda. He found the note a low and pleasant one and syllabled it as "Turee-whooh." Sheppard makes somewhat similar observations on the habits of this Red-billed Shrike near Beira. He writes: "Found in wooded districts, but, so

far as my observations go does not enter the densest bush, but prefers open places, where it is usually found in companies of from three to five. It seems to prefer the larger trees, and flies no distance when disturbed, but usually makes to a tree close by; its flight is rather heavy; it is a much more wary bird than *P. talacoma* and not so noisy. I do not think it is a resident here, but on this point am not quite certain. I have only noticed it during the hot months—October to March.”

Claude Grant, who met with this species in various localities in Portuguese East Africa, writes: “It cannot be considered plentiful though it was often seen, it is at all times wary and difficult to secure. It frequents both open and ordinary forest country, keeping more to the tops of the larger trees than does *Prionops talacoma*, and I have not seen it hunting in the native clearings. It is never seen in such large flocks as that species, being usually in parties of six or eight. The call is somewhat different from that of *P. talacoma*, but when handled it snaps its beak as does that bird, and also when one only is wounded the others will return to see what has happened to their companion. I have not seen this bird nesting or even in pairs, but always in flocks, even when with young.”

The habits of the northern race seem to be very similar. Hildebrandt (J. f. O. 1878, p. 224) met with it on the mainland, near Mombasa, and in the jungle along the Athi River in light acacia thickets in flocks of six to ten individuals scolding and calling. I have found no description of the nesting habits.

The British Museum contains examples of this species from the following localities:—

S. retzii: German S.-W. Africa—Oliphant Vlei (Anderson); Transvaal—Oliphants River (W. Ayres), Barberton (Pease); *S. Rhodesia*—Chirinda (Swynnerton).

S. r. nigricans: *Angola*—Humbe and Macongo (Anchieta); *Belgian Congo*—Katanga (Neave).

S. r. tricolor: *Portuguese East Africa*—Tete (Kirk), Beira, Tete and Tambarara (C. Grant); *Nyasaland*—Zomba and Fort Lister (Whyte), Malose, Mkimbi and Angolaland (A. Sharpe); *German East Africa*—Dar-es-Salaam, Usambara, Ugogo, Mamboio (Kirk).

S. r. graculinus: *German East Africa*—Dar-es-Salaam (Buxton), Mamboio (Kirk); *British East Africa*—Mombasa (Wakefield), Lamu (Jackson).

Genus IV. PRIONOPS.

Bill of moderate size, black in the adult, upper mandible hooked and notched; nostrils oval without membrane, but completely covered by the frontal feathers, which together with those of the front of the crown form a crest of bristly, upturned feathers. Eyelids yellow and jagged with a series of small wattles. Wing longer than the tail, moderately rounded, the secondaries falling short of tip of wing by barely half an inch; primaries, 3 to 6 longest, 2 reaches just to end of secondaries, 1 nearly half of 3. Tail rounded, outer feathers entirely white, the remainder black with white ends. Tarsus scutellated all round and orange-red like the feet. Sexes alike both in plumage and size.

Type.

Prionops, Vieill. Analyse, pp. 41, 70 (1816) *P. plumatus*.

The genus is confined to Tropical and South Africa and comprises ten species and subspecies. These are all very similar in size, and differ only in the colouring of the head and neck, the amount of crest, and in the presence or absence of a white band from the wing-coverts to the ends of the three outer secondaries.

KEY TO THE SPECIES.

- a.* A strongly marked white band down the wing from the median-coverts to end of secondaries.
 - a*¹. No feathers of the crown elongated, upstanding frontal feathers greyish *poliocephala*.
 - b*¹. Some feathers of crown considerably elongated, forming an occipital crest.

- a*². Crest feathers of deep slaty-grey *poliolopha*.
*b*². Crest feathers white.
 *a*³. Crest longer, over 1·0, and curved forwards, when
 smoothed down reaching to the black of the
 back *plumata*.
 *b*³. Crest shorter, not reaching beyond the nape.
 *a*⁴. Crest feathers straight to their ends *martensi*.
 *b*⁴. Crest-feathers curved inwards at their ends to
 form a sort of ridge. *concinata*.
b. No strongly marked white band down the wing and no
 white on the coverts.
*c*¹. Crown with crest of curved white feathers.
 *c*². Chin and throat white; occipital region pale grey . . . *cristata*.
 *d*³. Chin and throat tinged with smoky-grey; occipital
 region dark slaty-grey *omoensis*.
*d*¹. Crown without a true crest, though the frontal
 feathers are stiff and upstanding and white in colour.
 *e*². Hinder crown and the throat not vinous rufous.
 *c*³. Larger, wing over 4·5 *melanoptera*.
 *d*³. Smaller, wing under 4·5 *intermedia*.
 *f*². Hinder parts of crown and throat vinous rufous . . . *vinaceigularis*.

Prionops poliocephala.

Lanius poliocephalus, Stanley in Salt's Trav. Abyss. p. 50 (1814) *Mozambique*.

Prionops poliocephala, Neumann, J. f. O. 1905, p. 216.

Prionops talacoma, Smith, Rep. Exp. 1836, p. 45 *N. of Latakoo*; id. Ill. S. Afr. Av. pl. 5 (1838); Sharpe, Cat. B. M. iii. p. 321 (1877); Shelley, B. Afr. i. No. 666 (1896); Stark and Sel. Bds. S. Afr. ii. p. 51 (1901); Reichen. Vög. Afr. ii. p. 528 (1903); Sharpe, Handl. B. iv. p. 273 (1903); O.-Grant, Ibis, 1905, p. 202 *Mulema*; Stoehr and Sel. J. S. Afr. Orn. Union, 1906, p. 96 *N.-E. Rhodesia*; Swynnerton, Ibis, 1907, p. 49, 1908, p. 63 *Gazaland*; Neave, Man. Mem. li. No. 10, p. 70 (1907) *N.-E. Rhodesia*; Chubb, Ibis, 1909 p. 160 *Bulawayo*; Sheppard, J. S. Afr. Orn. Union, 1909, p. 30 *Beira*; Chubb, t. c. p. 68; Neave, Ibis, 1910, p. 225 *Katanga*; Selater, Ibis, 1911, p. 292.

Adult. Back, wings and tail black with a green gloss; wing, with a great portion of the inner coverts, broad outer edges to three of the secondaries and a broad band across the inner webs of the nine long primaries white, sometimes all the quills are tipped with white; tail-feathers with white ends increasing in size from the centre to the outer one,

which latter is entirely white; neck and under surface of the body white with the axillaries and under wing-coverts black and a little blackish-grey on the flanks; front and sides of head whitish shading into ashy-grey on the crown and into a dusky-slate coloured band behind the ears, forming an abrupt margin to the back and sides of the upper neck. "Iris gamboge yellow; eyelids chrome yellow; bill black, legs orange-red." Total length 7.5 inches, culmen to frontal feathers 0.5, wing 4.3, tail 3.4, tarsus 0.80. Rustenburg, ♂, 2. 9. 78 (Lucas). Female, wing 4.3, Swaziland (Buckley). The amount of grey on the head is variable, for in two specimens from Buwa in Nyasaland (A Sharpe) the heads are almost entirely pure white.

Immature. Crown, back (with traces of lighter edges to the feathers) and bill brown. Makalaka (Bradshaw).

The Southern Helmet-Shrike ranges northwards from Zululand, the Transvaal and Bechuanaland to Angola in the west, to south-west Uganda in the lake-regions and to Kitui in British East Africa.

It was met with by Sir A. Smith "north of Latakoo in 25° S. Lat." on the borders of the Rustenburg district of the Transvaal and Bechuanaland. He gave it the name by which it is generally known, *Prionops talacoma*.

Recently Neumann has shown that the description of *Lanius poliocephalus* by Lord Stanley in Salt's "Abyssinia" is not applicable to any Abyssinian species, but must refer to the South African species, and it seems possible that Salt may have obtained the specimen in Mozambique which he visited on his way to Abyssinia, and where he also collected. Whatever the explanation may be, the Southern Helmet-Shrike must in future bear Lord Stanley's name. I have recently examined an old dismounted specimen of a *Prionops* formerly in the Derby collection now in the Liverpool Museum, which although without any definite data or history is almost certainly Lord Stanley's original type collected by Salt. It is undoubtedly referable to the South African species.

On the western side of the continent, the species has been obtained as far north as Malange (Mechow and Schütt) and

is apparently fairly abundant from Angola to Damaraland. From the former country Mr. Monteiro writes: "Has a very discordant note, and is exceedingly wary and shy." According to Anchieta these birds are known by the natives at Caconda as the "Etua," at Quindumbo as the "Xica" and in the Humbe district as the "Kambimba." Chapman writes: "Not seen in southern Damaraland, but not uncommon in the more northern part. Observed also in the Lake regions, Zambesi, &c., gregarious. Usually found in secluded spots, where it hops restlessly from branch to branch in search of insects; they hunt quite systematically." He also notes: "The 'quagga dzerra' (*Prionops talacoma*) has a soft, sweet and pleasing note." Andersson collected specimens at Ondonga in Ovampoland and at Ovanquenyama in Damaraland.

Sir Andrew Smith found the species in small parties of six to eight, hunting the bushes and ground for their food, which largely consisted of termites and white ants, and remarks: "In flying, sometimes all the individuals of the little flock utter their cries simultaneously and the same practice they frequently observe while searching for food on the ground or upon bushes. When the mere inclination of one of the flock induces it to fly, all the rest follow the example."

The species has not been recorded from the Cape or Orange River colonies, nor from Natal, but in Zululand it has been met with by the brothers Woodward at St. Lucia Bay, Ulundi and Eschowe, and according to Mr. W. L. Sclater it is known to the Zulus as the "Ipemvu," and by the Swazis as the "Mtimbakazana." The following native names have also been recorded: "Madshwe-Ishgwe" in Mashonaland (Marshall); "Koumeniamonia," on the Zambesi (Foa); "Manda" in Angoni (Manning); "Tschiwewe," in Quilimane, "Melandugu" and "Niana" in Suaheli (Stuhlmann) "Nyanda" in Ugogo (Pruen).

Mr. T. Ayres writes: "These birds are sparingly found in small companies through the wooded parts of the Rustenburg district. They are extremely wild." Mr. T. E. Buckley records them as common from Pretoria into the Matabele country, and by no means shy there. Mr. Guy Marshall writes from Mashonaland: "This bird is always found in small flocks of four or six in the bush. These always keep together, sitting on low bushes or low down on the trunks of trees. They seem to feed chiefly on caterpillars. Their note is a sort of chatter like 'ishqwe,' repeated quickly four or five times." Mr. J. L. Sowerby also writes: "Common in the bush-veld both in Nyasaland and Matabele. Keeps in small parties of a dozen or so, which fly low and steadily just out of one's way." At Tete, on the Zambesi, Sir John Kirk remarks: "Native name, 'Menya-menya,' from the sound it makes as if two pieces of bone were struck together." On the same river Mr. Alexander writes of the species: "Not numerous, fond of thick places, travelling in perfect silence in small parties through the monotonous woods of *Copaifera mopane*, where they are almost the only birds to be seen. Sometimes they are pursued by Drongo Shrikes, which despoil them of their prey. They have an airy flight which gives one the idea that they are made of paper."

Claude Grant collected a good series of the southern *Prionops* in the Ntambana Hills in Zululand and at various localities northwards through the eastern Transvaal to Tete. All his examples were obtained in the winter months (April to September). He believed at first that they were migratory; other collectors, however, have obtained the species in the summer months, and though undoubtedly migratory to a certain extent, they are probably subject to local movements only. It is remarkable, however, that the nest and eggs have never been found south of the Zambesi.

Swynnerton states that this species is called Mariganyama by the Chindaos of Gazaland, and gives the following account: "Not uncommon in the open woods, usually forming a member of the Drongo's regiment, though it sometimes dispenses with this protection. A flock of eight or nine individuals frequented a "Manzhanshi" grove close to my homestead throughout the past winter accompanied only by a pair of *Graucalus pectoralis* and two *Lophoceros melanoleucus*. A stomach examined contained several grasshoppers. The natives regard this species as a bird of omen; should it cross their path while hunting, from right to left, all is well and they can proceed in full confidence of success; should it, however, cross from left to right, nothing but the worst of ill-fortune can await him who is so foolhardy as to disregard the warning, and the only sensible course is to go straight home. It is one of the few birds the flesh of which the natives will not eat.

In north-east Rhodesia the nest and eggs were taken by Neave at Petauke in the Loangwa valley on March 27. There were several nests together, so that it is evident that the bird breeds in colonies. The nest was made of fibre and dry grass, plastered outside with white cobwebs giving it a silvery appearance. The eggs, four in number, were pale bluish stone-colour spotted and dotted with reddish and purplish-brown, with underlying blotches of purplish-grey; they measured 0.80 to 0.85 × 0.6

In the large collections of specimens I have seen from Nyasaland there are two examples from Buwa which have their heads entirely white, a variation of plumage which is likewise known to occur in *P. plumatus*, *P. cristatus* and *P. melanoptera*.

Böhm found the species abundant, and met with a nest on March 18 containing two fresh eggs. The nest was placed

in the fork of a small tree, well covered with leaves, at the edge of a copse near Kakoma in German East Africa, and was constructed of grass covered with spiders-web so as closely to assimilate in colour the greenish-grey bark of the tree, but was not sufficiently large to hide the tail of the sitting bird. The eggs were of a bluish-green colour marked with brownish-red spots mostly towards the thick end, where they formed a zone. The eggs procured by Schütt in Angola have likewise been described as of a pale bluish-green with reddish spots.

Mr. Oscar Neumann procured examples of the species in Nguru, and records it as generally to be met with in flocks of eight to twelve to as far north as south Ukamba on the east side of the Victoria Nyanza, but it ranges further north on the western side of that lake, Doggett having collected a hen bird and her young at Mulema and a full plumaged male in south-west Ankole in southern Uganda.

Examples in the British Museum from the following localities have been examined:—

Zululand—Ntambana Hills (Grant); *Transvaal*—Woodbush, Klein Letaba, and Legogot (Grant), Holfontein (Oates), Rustenburg (Lucas), Swaziland (Buckley); *Bechuanaland*—Shoshong (Oates); *German South-west Africa*—Ondonga and Ovaquenyama (Andersson); *Angola*—Caconda (Anchieta), Galungo (Sale), Malange (Ansorge); *Belgian Congo*—Kambove (Neave); *South Rhodesia*—Tati River (Jameson), Salisbury (Marshall), Mazoe (Darling), Fort Chiquaqua (Sowerby), Rocky Drift (Clark); *Portuguese East Africa*—Cogumo, Beira (Grant), Tete (Kirk, Alexander, and Grant), Mapicuti (Cavendish); *Nyasaland*—Zomba, Fort Lister, Buwa, Luangwa (Whyte and Sharpe); *German East Africa*—Ugogo, Dar-es-Salaam, and Mamboio (Kirk); *Uganda*—Mulema and South-west Ankole (Doggett); *British East Africa*—Kitui (Hinde).



1. *Prionops poliophus*.
2. *Sigmodus mentalis*

Prionops poliolopha. (Pl. 57, fig. 1.)

Prionops poliolophus, Finsch and Reichen. J. f. O. 1884, p. 180
Naiwasha; Shelley, B. Afr. i. No. 663 (1896); Reichen. Vög.
Afr. ii. p. 532 (1903); Sharpe, Handl. B. iv. p. 273 (1903).

Similar to *P. poliocephala*, but larger and with the head crested; on the front half of the head the feathers are bristle-like and whitish-grey, and curve anteriorly over the base of the bill, posteriorly back to the base of the crest; the crest itself on the posterior half of the crown is short, about 1.0, and slaty-grey; a patch of black on either side of the breast near the crop; no bare wattle round the eye. Iris bright yellow; eyelids black; bill black; legs orange; claws black. Length 9.75 inches, wing 5.2, tail 4.0, culmen to frontal feathers 0.35, tarsus 0.95. Kedong River, ♀, 13. 12. 99 (Lord Delamere).

The Grey-crested Helmet-Shrike ranges from the Unyam-wesi country of German East Africa into Kikuyu in British East Africa.

The species has, in its most southern known range, been recorded from Ugalla (Trotha) to the east of Lake Tanganyika in about 6° S. lat.

Towards the south and east of the Victoria Nyanza Mr. Oscar Neumann has procured specimens at Muansa, Ngara, Mousse, and Ssero. The type was discovered at Lake Naiwasha by Fischer, where he killed the female off the nest on May 11. This was placed in the fork of a tree about ten feet from the ground. It was shallow and cup-shaped, 3.2 inches wide inside, and was composed of grass-stalks and spiders' web. It contained one egg, which was greenish-blue with a zone of many dull greyish-brown and red-brown spots, and measured 0.84 × 0.68. In Kikuyu it has been obtained by Lord Delamere in the Kedong valley, in which locality Mr. Jackson shot an adult female and a full-grown young bird out of a small flock. Doherty also obtained a fine series for the Tring Museum near Escarpment Station in British East Africa. No doubt all the members

of this genus are very similar in habits, for Mr. Neumann observed that in this species they are very like those of *P. poliocephala*.

The only example in the British Museum is the one obtained by Lord Delamere on the Kedong River already alluded to.

Prionops plumata.

Lanius plumatus, Shaw, Gen. Zool. viii. p. 292 (1809) *ex Levaill.*

Prionops plumatus, Swains. B. W. Afr. i. p. 246, pl. 26 (1837); Sharpe, Cat. B. M. iii. p. 320 (1877); Shelley, B. Afr. i. No. 662 (1896); Reichen. Vög. Afr. ii. p. 533 (1903); Sharpe, Handl. B. iv. p. 273 (1903).

Prionops geoffroii, Vieill. N. Dict. iii. p. 145 (1816) *ex Levaill.*

Le Geoffroy, Levaillant, Ois. d'Afr. ii. p. 124, pls. 80, 81 (1799) *Senegal.*

Similar to *P. poliocephalus*, from which it differs in having a long crest of white decomposed feathers which reach a length of about 1·5 inches, springing from the centre of the crown and directed backwards; the white nape band is also wider, and the stiff forwardly directed frontal-feathers longer and purer white. "Iris dark greenish-grey with an outer ring yellow, fleshy ring round the eye aurora yellow, bill greenish-black, feet pale venetian-red." Length 9·5 inches, wing 4·6, tail 3·8, culmen to frontal feathers 0·5, tarsus 0·9. Gunnal, ♂, 29. 4. 09 (Ansorge). Female, wing 4·6 (Ansorge).

Young bird. Has no crest, and the crown washed with pale brown; the back is dusky brown with traces of paler edges to the feathers. Fleshy ring round the eye dark olive green; feet ochre yellow. Gunnal (Ansorge).

The Long-Crested Helmet Shrike ranges from Senegambia into northern Nigeria. The species was first described and figured by Levaillant, who called it the "Geoffroy," after the traveller, M. Geoffroy de Villeneuve, who first brought it from Senegal, and Shaw's and Vieillot's names were founded on Levaillant's description. Marche and De Compiègne collected specimens at Deine and Ponte near Cape Verde, and it is apparently not uncommon throughout its range both inland and along the coast. It has been procured on the island of Bulama by Barahona, and from the Los Island there is a

specimen in the Paris Museum, while inland at Gambaga it has been met with by Captain Giffard and Colonel Northcott.

Mr. J. S. Budgett, during his stay at the Gambia, visited Nianimaru and writes: "All the Shrikes were found solitary or in pairs, except *Prionops plumata*, which moved restlessly about the thickets of the stony plateau in parties of a dozen." He also found them "fairly common in small parties" at Kunchow Creek. From the Gold Coast Mr. Alexander writes: "This bird frequents the wooded banks of the rivers and streams, and is generally observed in small flocks of five or six." It is apparently equally distributed in Togoland and along the Niger River. In the latter district Forbes obtained it at Kabba, and Dr. Hartert at Saria and Loko in restless parties wandering through the thick bush; they were not shy until shot at, when they soon learned to take care of themselves. Their note consisted of a peculiarly harsh chirping noise, and they frequently snapped their bills after the manner of owls.

In the British Museum the following specimens have been examined:—

Senegal (Riocour); *Gambia* (Rendal and Ward); *Portuguese Guinea*—Gunnal and Bolama (Ansorge); *Sierra Leone*—(Skinner); *Gold Coast Colony*—Gambaga (Northcott), River Volta (Alexander); *Northern Nigeria*—Illorin (Bryant), Rabba (Forbes).

***Prionops concinnata*.**

Prionops concinnatus, Sundev. Oefv. Ak. Förh. Stockh. 1850, p. 130
Roseires; Neum. J. f. O. 1905, p. 218.

Prionops poliocephalus (non Stanley), Sharpe, Cat. B. M. iii. p. 321 (1877); Shelley, B. Afr. i. No. 664 (1896); Reichen. Vög. Afr. ii. p. 531 (1903); iii. p. 833 (1905); Sharpe, Handl. B. iv. p. 273 (1903); Butler, Ibis, 1905, p. 327; 1908, p. 224, 1909, p. 80 *Sudan*; Koenig, Ber. V. Intern. Orn. Kongr. 1910, p. 511 *Mechra-el-Zeraf*.

Similar to *P. poliocephala*, but with the feathers of the front part of the head bristle-like and erect, forming a low crest, which with the lores and chin region is pure white; back of the head dark slaty grey separated from the black of the back by a broad white neck ring; differing from *P. plumata* and *P. poliocephala* by the absence of the long occipital crest. "Eye wattle yellow." Hedenborg. Length 9.5 inches, wing 4.6, tail 3.8, culmen 0.4, tarsus 0.9. Wandî, ♀, 3. 9. 81 (Emin).

The Nile Helmet-Shrike ranges over the basins of the Blue and White Niles westwards to the Shari River in French Congo.

The type was obtained by Hedenborg for Sundevall at Roseires on the Blue Nile and it has more recently been met with on the same river at Gallabat by Butler as well as at Jebel Ahmed Aga on the White Nile and at several localities in the Bahr el Ghazal, but he states that it is nowhere common. Koenig obtained two from a flock seen at Mechra-el-Zeraf on the White Nile on April 4, 1910. There is a single example of this species in the British Museum, collected by Alexander at Ratu on the Gribangui River in French Congo, on September 14, 1905. This is on the route from Lake Chad to the Ubangwi River and extends the range of the species many miles to the westward.

In the British Museum the following examples have been examined: *Abyssinia*—Beni Schongul near the Senaar frontier (Lord Lovat); *Egyptian Sudan*—Nubia (Verreaux), Upper White Nile (Stockholm Mus.), Wandî in Makraka country (Emin), Bahr el Ghazal (Blaine); *French Congo*—Ratu (Alexander).

Prionops martensi.

Prionops martensi, Reichen. Beiheft Arch. Naturg. 1901, p. 330 *E. Camaroon*; id., Vög. Afr. ii. p. 532 (1903); Sharpe, Handl. B. iv. p. 273 (1903).

"Similar to *P. concinnata*, with the white crest of the same length, but these lengthened feathers are perfectly stiff and straight as in *P. plumata*, not curved at the ends. Total length 8.3 to 8.5 inches, culmen 0.85, wing 4.7, tail 3.9 to 4.3, tarsus 0.95." (Reichenow.)

Martens's Helmet-Shrike inhabits eastern Camaroon. The species is as yet known only by the typical specimens collected by Carnap. Possibly, as Dr. Reichenow suggests, the specimen of *P. plumata*, Hartl., W. Afr. p. 107 (1857) from Gaboon may belong to this species. It is an intermediate race between *P. plumata* and *P. concinnata*, with a strong inclination towards the latter species.

Prionops cristata.

Prionops (Lanius) cristatus, Rüpp. N. Wirb. Vög. p. 30, pl. 12, fig. 2 (1835) *Massaua*.

Prionops cristatus, Shelley, B. Afr. i. No. 665 (1896); Reichen. Vög. Afr. ii. p. 530 (1903); Sharpe, Handl. B. iv. p. 273 (1903); Ogilvie-Grant, Ibis, 1904, p. 267 *Bija*; Bannermann, Ibis, 1910, p. 304 *Burao*.

Prionops cristata cristata, Neum. J. f. O. 1905, p. 215 *Zwai lake*; Zedlitz, J. f. O. 1916, p. 795 *Eritrea*.

Subspecies a. Prionops omoensis.

Prionops cristatus omoensis, Neumann, J. f. O. 1905, p. 216 *Omo River*.

Subspecies b. Prionops melanoptera.

Prionops melanoptera, Sharpe, Bull. B.O.C. xi. p. 46 (1901) *Fer Libah, Somaliland*; Reichen. Vög. Afr. ii. p. 530 (1903); Sharpe, Handl. B. iv. p. 274 (1903); Neum. J. f. O. 1905, p. 219; Erlanger, *t.c.*, p. 699, pl. 16, fig. 1.

Subspecies c. Prionops intermedia.

Prionops intermedius, Sharpe, Bull. B.O.C. xi. p. 47 (1901) *Teita*; id. Handl. B. iv. p. 274 (1903); Neum. J. f. O. 1905, p. 219.

Prionops melanoptera intermedia, Reichen. Vög. Afr. ii. p. 530 (1903).

Adult. Very similar to *P. concinnata*, especially in the form of the crest and the colouring of the head, but differing from it and all the previous species in having no white on the wing-coverts, while the secondaries are generally without any white edging, or occasionally have a very narrow band towards the tip of the feathers. Length 9.0 inches, wing 4.4, tail 3.7, culmen 0.4, tarsus 0.9. Abyssinia (Verreaux).

Subspecies P. c. omoensis. Differs from the typical form in having the occipital region much darker, usually dark slate blue instead of pearl grey; the throat also is washed with smoky instead of being pure white, and the patch across the ear-coverts is almost black. Iris and eyelid yellow, bill

black, legs orange red. Wing 4·7, tail 3·9, tarsus 0·9, wing of female 4·8, Moulou River, ♂, ♀, 14. 3. 01 (Pease).

Subspecies P. c. melanoptera. Differs from the typical form in the shortness of the frontal crest, the feathers of which though erect and stiff are hardly longer than those of *P. poliocephala*, nor are the posterior ones curled forward, but lie back almost flat on the crown, and hardly extend back behind the level of the eye. Wing 4·5, tail 3·7, tarsus 0·9, wing of female 4·8. Fer Libah, Somaliland, type, ♂, ♀, 20. 10. 96 (Lord Delamere).

Two examples from Somaliland collected by Lort Phillips have entirely white heads and are perhaps young birds.

Subspecies P. c. intermedia. Differs from *P. c. melanoptera* only in its smaller dimensions, while both the examples examined have very narrow white edgings to the inner secondaries. Wing 4·2, tail 3·4, tarsus 0·8. Teita, type (Hunter).

The Black-winged Helmet-Shrike ranges over north-east Africa from Eritrea to Mount Elgon and Baringo, and eastward to Teita and Somaliland.

Neumann and Zedlitz recognize four distinguishable subspecies the characters of which are given above and are fairly recognizable. The following is the distribution:—

P. c. cristata.—Type obtained by Rüppell near Massaua on the Red Sea, in Eritrea and northern Abyssinia.

P. c. omoensis.—Type obtained by Neumann on the Omo River north of Lake Stephanie—from Elgon and Baringo to Shoa.

P. c. melanoptera.—Type obtained by Atkinson (for Lord Delamere), at Fer Libah in western Somaliland—throughout Somaliland from Harrar to the lower valley of the Juba River.

P. c. intermedia.—Type from Teita in British East Africa—in the desert country of the eastern portion of British East Africa.

The habits of this species resemble those of the other Helmet-Shrikes. They are invariably found in flocks of 10 to 20 birds and frequent dry acacia country. They do not go into the mountains or into thick bush. Erlanger found

them very shy, but relates that he winged one individual out of a flock, whereupon the others all came back and he was able to secure additional specimens. The winged individual in the meantime snapped its bill and bit furiously around it. They were by no means common.

Examples from the following localities in the British Museum have been examined:—

P. c. cristata. *Eritrea*—Bogosland (Shelley collection); *Abyssinia* (Verreaux collection).

P. c. omoensis. *Abyssinia*—Moulou River (Pease), Aroussa country and Lake Abaya (Zaphiro).

P. c. melanoptera. *Abyssinia*—Hubub and Hoosa near Harrar (Pease), Bija (Degen); *Somaliland*—Fer Libah, type (Atkinson), Shebeili River (Gillett).

P. c. intermedia. *British East Africa*—Teita, type (Hunter).

Mr. Jackson's collection contains examples of *P. c. omoensis* from Mangiki and Turquel in the Elgon district and the Laikipia foothills in Baringo.

Prionops vinaceigularis.

Prionops vinaceigularis, Richmond, Auk, 1897, p. 162 *Kilimanjaro*; Reichen. Vög. Afr. ii. p. 533 (1903); Sharpe, Handl. B. iv., p. 274 (1903).

Similar in every respect to *P. cristata intermedia* except that the back half of the crown, the sides of the head, ear-coverts, and cheeks are a vinous cinnamon instead of grey, the throat is also washed with the same colour but a good deal less heavily. "Iris and skin round the eye, yellowish-green; feet red." Length about 7.75 inches, wing 4.25, tail 3.50, culmen to frontal feathers 0.45, tarsus 0.85. Plains east of Kilimanjaro, ♀, 6.10.88 (Abbott).

Through the courtesy of the authorities of the United States National Museum I have been able to examine one of the co-types of this species, the three known examples of

which were obtained by Dr. W. L. Abbott on the plains east of Kilimanjaro.

I have little doubt that this is merely a young stage of *P. cristata intermedia*, but until more examples are available for examination I would keep them separate. Should my surmise prove correct Richmond's name has priority, and the Kilimanjaro Helmet-Shrike should be known as *Prionops cristata vinaceigularis*, of which *P. cristata intermedia* will become a synonym.

INDEX I.

Latin Names.

Entries in italics refer to synonyms.

-
- | | |
|--|---|
| <p><i>abbotti</i>, <i>Chlorophoneus</i>, 424
 <i>Abbottornis</i>, 187
 <i>abyssinica</i>, <i>Lamprotornis</i>, 93
 <i>abyssinicus</i>, <i>Lamprocolius</i>, 73
 <i>Acridotheres</i>, 128
 <i>aculeatus</i>, <i>Dicrurus</i>, 173
 <i>acuticaudatus</i>, <i>Lanius</i>, 161
 <i>acuticaudus</i>, <i>Lamprotornis</i>, 69
 <i>adolphi-friederici</i>, <i>Dryoscopus</i>, 356
 <i>adolphi-friederici</i>, <i>Malaconotus</i>, 417
 <i>æneocephalus</i>, <i>Lamprotornis</i>, 56
 <i>æneoides</i>, <i>Juida</i>, 56
 <i>æquatorialis</i>, <i>Urolestes</i>, 232
 <i>Aërocharis</i>, 197
 <i>æruginosus</i>, <i>Lanius</i>, 281
 <i>æthiopicus</i>, <i>Laniarius</i>, 312
 <i>afer</i>, <i>Dicrurus</i>, 172
 ,, <i>Nilaus</i>, 456
 <i>affinis</i>, <i>Corvinella</i>, 237
 <i>affinis</i>, <i>Corvus</i>, 140
 ,, <i>Dryoscopus</i>, 342
 <i>affinis</i>, <i>Dryoscopus</i>, 339
 ,, <i>Lanius</i>, 281
 <i>affinis</i>, <i>Nilaus</i>, 462
 <i>afra</i>, <i>Cryptorhina</i>, 161
 <i>africana</i>, <i>Buphaga</i>, 23
 <i>albicapillus</i>, <i>Spreo</i>, 88
 <i>albicaudus</i>, <i>Moquinus</i>, 442
 <i>albicollis</i>, <i>Corvultur</i>, 134
 <i>albicollis</i>, <i>Lanius</i>, 244
 <i>albifrons</i>, <i>Vanga</i>, 186
 <i>albirostris</i>, <i>Onychognathus</i>, 114
 <i>albofasciatus</i>, <i>Dryoscopus</i>, 306</p> | <p><i>alboplagatus</i>, <i>Laniarius</i>, 330
 <i>albus</i>, <i>Corvus</i>, 144
 <i>aldabranus</i>, <i>Dicrurus</i>, 172
 <i>alpinus</i>, <i>Pyrrhocorax</i>, 157
 <i>ambiguus</i>, <i>Laniarius</i>, 312
 <i>amethystinus</i>, <i>Lamprotornis</i>, 78
 <i>ampelinus</i>, <i>Hypocolius</i>, 34
 <i>Amydrus</i>, 96
 <i>anchietæ</i>, <i>Antichromus</i>, 389
 <i>anderssoni</i>, <i>Campephaga</i>, 218
 ,, <i>Lanius</i>, 281
 ,, <i>Oriolus</i>, 7
 <i>angolensis</i>, <i>Dryoscopus</i>, 355
 <i>angolensis</i>, <i>Oriolus larvatus</i>, 13
 <i>anguitimens</i>, <i>Eurocephalus</i>, 445
 <i>annæ</i>, <i>Artamia</i>, 188
 <i>ansorgei</i>, <i>Dryoscopus</i>, 357
 ,, <i>Tschagra</i>, 382
 <i>Antichromus</i>, 386
 <i>antinorii</i>, <i>Lanius</i>, 258
 <i>approximans</i>, <i>Malaconotus</i>, 412
 <i>Archicorax</i>, 134
 <i>Archolestes</i>, 406
 <i>arenarius</i>, <i>Lanius</i>, 293
 <i>armenus</i>, <i>Pomatorhynchus senegalus</i>,
 363
 <i>arnaudi</i>, <i>Lanius</i>, 249
 <i>Artamia</i>, 186
 <i>arundinarius</i>, <i>Oriolus</i>, 13
 <i>assimilis</i>, <i>Buchanga</i>, 172
 ,, <i>Lanius</i>, 270
 <i>atactus</i>, <i>Dicrurus</i>, 173
 <i>ater</i>, <i>Ceblepyris</i>, 205</p> |
|--|---|

- atripennis*, *Dicrurus*, 181
atrococcineus, *Laniarius*, 322
atrocroceus, *Laniarius*, 322
atroflavus, *Laniarius*, 319
aucheri, *Lanius*, 268
auratus, *Hartlaubius*, 36
 ,, *Oriolus*, 5
auratus, *Turdus*, 78
auriculatus, *Phoneus*, 290
australis, *Lamprotornis*, 62
 ,, *Tschagra*, 374
azurea, *Coracina*, 225

baobakiri, *Laniarius*, 402
badius, *Phoneus*, 291
Bulicassius, 166
barbarus, *Laniarius*, 319
baruffi *Oriolus*, 17
Basanistes, 232
batesi, *Chlorophoneus*, 421
benguensis, *Lamprotornis*, 59
benguellensis, *Amydrus*, 103
bernieri, *Oriolia*, 192
bertrandi, *Chlorophoneus*, 433
Bhuchanga, 166
bicolor, *Artamia*, 190
 ,, *Laniarius*, 316
bicolor, *Oriolus*, 5
bicolor, *Speculipastor*, 47
 ,, *Spreo*, 85
bispecularis, *Lamprocolius*, 70
blanchoti, *Malaconotus*, 407, 409
blanfordi, *Telephonus*, 371
blythi, *Onychognathus*, 109
Bocagia, 386
bocagei, *Dryoscopus*, 357
bogdanowi, *Lanius*, 279
böhmi, *Fiscus*, 265
bojeri, *Dryoscopus*, 342
borbonicus, *Fregilupus*, 131
boulboul, *Laniarius*, 303
brachyrhynchus, *Corvus*, 141
brachyrhynchus, *Oriolus*, 17
brachyurus, *Corvus*, 140
brevicaudata, *Lamprotornis*, 56

brevicaudatus, *Corvus*, 141
brubru, *Nilaus*, 451
bulbul, *Laniarius*, 303
Buphaga, 23
Buphaginæ, 22
burchellii, *Lamprotornis*, 62

cabanisi, *Fiscus*, 262
cæsia, *Coracina*, 221
cafer, *Corvus*, 134
 ,, *Lanius*, 303
caffer, *Onychognathus*, 103
Calicalicus, 196
camerunensis, *Dryoscopus senegalensis*, 339
camerunensis, *Nilaus*, 460
camerunensis, *Telephonus senegalus*, 363
cameruniensis, *Fiscus*, 252
Campephaga, 201
Campophagidæ, 198
cana, *Muscicapa*, 215
caniceps, *Lanius phœnicurus*, 295
caniceps, *Sigmodus*, 464
canipennis, *Dicrurus*, 173
canolimbatu, *Amydrus*, 113
capelli, *Lanius*, 254
capensis, *Campephaga*, 227
capensis, *Corvus*, 152
capensis, *Nilaus*, 451
 ,, *Oriolus*, 13
 ,, *Upupa*, 131
carbonarius, *Laniarius*, 332
carunculata, *Creatophora*, 123
casatii *Dryoscopus*, 306
castaneiceps, *Laniarius*, 301
catharoxanthus, *Malaconotus*, 407
cathemagmenus, *Rhodophoneus*, 395
catholeucus, *Telephonus senegalus*, 363
caudatus, *Fiscus*, 262
caudatus, *Lamprotornis*, 53
Ceblepyris, 214
chabert, *Artamia*, 189
Chaetoblemma, 445
Chalcopsar, 52

- chalcurus*, *Lamprotornis*, 77
chalybæus, *Lamprotornis*, 73
Chaunonotus, 359
chloris, *Nicator*, 436
chloris, *Oriolus*, 13
chlorocephalus, *Oriolus*, 10
Chlorophoneus, 418
chloropterus, *Lamprotornis*, 73
chryseus, *Oriolus*, 5
chrysogaster, *Laniarius*, 325
 „ *Malaconotus*, 427
 „ *Turdus*, 93
chrysonotis, *Lamprotornis*, 67
chrysostictus, *Laniarius*, 325
chubbi, *Lamprocolius*, 67
cinerascens, *Cebblepyris*, 218
 „ *Dryoscopus*, 346
cinerea, *Coracina*, 215
cinereiceps, *Lamprotornis*, 93
Cinnamopterus, 96
Cinnyricinclus, 37
cissoides, *Lanius*, 237
 „ *Basanistes*, 232
Coccycolius, 52
cærulea, *Campophaga*, 225
cognatus, *Lanius*, 287
collaris, *Fiscus*, 247
collaris, *Telophorus*, 402
collurio, *Enneoctonus*, 280
comorensis, *Artamia*, 191
concinata, *Prionops*, 483
congener, *Tschagra*, 374
congius, *Dryoscopus*, 344
congius, *Lanius humeralis*, 252
Coracina, 214
coracinus, *Dicrurus*, 177
cōracinus, *Dicrurus*, 173
coronatus, *Dryoscopus*, 301
 „ *Lanius*, 363
Corone, 140
corone, *Corvus*, 149
corusca, *Lamprocolius*, 82
Corvi, 1
Corvidæ, 133
corvina, *Corvinella*, 237
Corvinella, 236
Corvultur, 134
Corvus, 140
Cosmophoneus, 418
Cosmopsarus, 48
crassirostris, *Corvultur*, 138
crassirostris, *Corvultur*, 134
crassirostris, *Oriolus*, 21
Creatophora, 122
cristata, *Coracias*, 131
cristata, *Prionops*, 485
cristatus, *Dicrurus*, 167
cruentus, *Malaconotus*, 415
 „ *Rhodophoneus*, 392
cryptopyrrhus, *Myiopsar*, 117
Cryptorhina, 161
cubla, *Dryoscopus*, 349
cucullata, *Coracina*, 217
cucullatus, *Dryoscopus*, 344
cupreocaudus, *Lamprotornis*, 80
curvirostris, *Corvus*, 145
curvirostris, *Vanga*, 193
cyanogenys, *Lamprocolius*, 73
Cyanograucalus, 214
Cyanolanius, 187
cyanotis, *Lamprotornis*, 77
cyanovenstris, *Lamprocolius*, 73
Cyrtes, 201
damarensis, *Urolestes*, 232
dami, *Xenopirostris*, 186
dauricus, *Corvus*, 144
dealbatus, *Lanius*, 270, 272
defilippi, *Lamprocolius*, 67
dichrous, *Lanius*, 279
Dicruridæ, 166
Dicrurus, 166
digitata, *Pyrrhocorax*, 157
Dilophus, 122
divaricata, *Muscicapa*, 173
dohertyi, *Telophonus australis*, 374
dohertyi, *Telophorus*, 400
dorsalis, *Fiscus*, 261
Drongus, 166
Dryoscopus, 337

- dubia*, *Tanagra*, 210
dubiosus, *Laniarius*, 301
dubius, *Amydrus*, 120
dumetorum, *Lanius*, 280

edithæ, *Corvus*, 151
Edolius, 166
edwardsi, *Nilaus*, 456
elæagni, *Lanius*, 279
elegans, *Lanius*, 271
elgonensis, *Amydrus*, 100
emarginata, *Muscicapa*, 173
emini, *Tschagra*, 374
Enneoctonus, 280
erlangeri, *Laniarius*, 330
erlangeri, *Nilaus afer*, 454
erlangeri, *Tschagra*, 371
erythreæ, *Dryoscopus malzacii*, 346
erythreæ, *Nilaus*, 456
erythrogaster, *Laniarius*, 325
erythrogaster, *Turdus*, 93
erythrophthalmos, *Dicrurus*, 173
erythropterus, *Telephonus*, 363, 380
erythrorhyncha, *Buphaga*, 23
Eulabes, 130
Eurocephalus, 444
Euryceros, 197
excubitorius, *Fiscus*, 234
eximius, *Lanius*, 276
eytoni, *Lamprotornis*, 53

fallax, *Lanius*, 268
femoralis, *Cinnyricinclus*, 45
ferrugineus, *Laniarius*, 303
ferrugineus, *Lanius*, 227
finschii, *Dryoscopus*, 311
fischeri, *Cinnyricinclus*, 44
fischeri, *Pholidauges*, 45
Fiscus, 240
fiscus, *Lanius*, 249
flava, *Campephaga*, 205
flavescens, *Lanius*, 276
flavivostis, *Lanius*, 237
forficatus, *Dicrurus*, 167
frater, *Onychognathus*, 101

frater, *Tschagra*, 375
Fregilupus, 131
Fregilus, 157
frenatus, *Graucalus*, 218
 „ *Telephonus*, 374
fugax, *Dicrurus*, 173
fulgida, *Campephaga*, 202
fulgidus, *Onychognathus*, 97
fülleborni, *Laniarius*, 336
fulvipennis, *Lamprotornis*, 103
funebis, *Laniarius*, 327
fuscipennis, *Dicrurus*, 171

gabonensis, *Malaconotus*, 416
galatea, *Muscicapa*, 167
galbula, *Oriolus*, 3
Galeopsar, 96
gallinaceus, *Sturnus*, 123
galtoni, *Pomatorhynchus*, 370
gambensis, *Dryoscopus*, 344
geoffroyi, *Prionops*, 482
gladiator, *Malaconotus*, 417
glaucovirens, *Lamprocolius*, 65
gracilirostris, *Acridotheres*, 36
 „ *Amydrus*, 105
Gracula, 130
graculinus, *Sigmodus*, 470
Graucalus, 214
græcus, *Lanius*, 277
graueri, *Coracina*, 221
graueri, *Laniarius*, 422
greyi, *Pœoptera*, 119
grimmi, *Lanius*, 270
griseimentalis, *Sigmodus*, 467
griseipectus, *Vanga*, 194
grisescens, *Dryoscopus senegalensis*,
 339
grisea, *Ceblepyris*, 215
gryllicora, *Gracula*, 128
gubernator, *Enneoctonus*, 285
gularis, *Nicator*, 439
guttatus, *Dryoscopus*, 308
 „ *Lamprocolius*, 73
guttatus, *Laniarius*, 310
gutturalis, *Chlorophoneus*, 397

gutturalis, *Laniarius*, 402
gymnocephalus, *Picathartes*, 159

habessinica, *Buphaga*, 28
habessinica, *Tschagra*, 371
hæmatothorax, *Malaconotus*, 416
Hagiopsar, 96

hamatus, *Dryoscopus*, 349

Hapalophus, 337

Harpolestes, 361

hartlaubi, *Campephaga*, 209

„ *Onychognathus*, 93

hartlaubi, *Pomatorhynchus*, 387

Hartlaubius, 36

harterti, *Amydrus*, 98

harterti, *Sigmodus*, 464

hemileucurus, *Lanius*, 271

Heterocorax, 140

Heteropsar, 52

hildebrandti, *Spreo*, 91

hilgerti, *Nilaus*, 456

„ *Rhodophoneus*, 394

hirundinacea, *Pholia*, 46

hirundinaceus, *Analcipus*, 189

holomelas, *Laniarius*, 334

humeralis, *Fiscus*, 249

hybridus, *Laniarius*, 303

Hylophorba, 196

Hypocolius, 33

hypopyrrhus, *Malaconotus*, 409

hypopyrrhus, *Malaconotus*, 412

Hypsipus, 442

icterus, *Laniarius*, 407

„ *Oriolus*, 5

ignatii, *Ceblepyris*, 210

ignea, *Campephaga*, 212

ignita, *Lamprotornis*, 64

infumatus, *Corvus*, 149

infuscatus, *Lanius*, 279

intenseincta, *Pyrrhocheira*, 103

intercedens, *Lanius excubitorius*, 264

intermedia, *Prionops*, 485

intermedius, *Amydrus*, 105

„ *Onychognathus*, 98

intermedius, *Oriolus*, 17

intermedius, *Sigmodus*, 470

isabellina, *Ceblepyris*, 34

isabellina, *Otomela*, 293

isabellinus, *Lanius*, 295

iris, *Lamprotornis*, 84

italicus, *Lanius*, 276

jacksoni, *Dryoscopus*, 357

jamesi, *Tschagra*, 383

jardirii, *Enneoctonus*, 287

Juida, 51

juidæ, *Turdus*, 78

karelini, *Otomela phœnicuroides*, 295

kenricki, *Pœoptera*, 120

kiek, *Lanius*, 265

kinki, *Muscicapa*, 215

kismayensis, *Laniarius*, 300

„ *Tschagra*, 383

labrosa, *Muscipeta*, 205

læmocyclus, *Nicator chloris*, 436

lætior, *Oriolus*, 17

lafresnayi, *Xenopirostris*, 185

lagdeni, *Malaconotus*, 414

Lamprocolius, 51

Lamprotornis, 51

Laniariinae, 296

Laniarius, 297

Lanieterus, 201

Lanii, 165

Laniidæ, 230

Laniinæ, 231

Lanioturdus, 442

Lanius, 267

Lantzia, 195

larvata, *Gracula*, 123

larvatus, *Oriolus*, 12

leguati, *Necropsar*, 132

lepidus, *Laniarius*, 436

Leptopterus, 187

lessoni, *Juida*, 67

„ *Lamprocolius*, 66

„ *Laniarius*, 415

- leucocephala*, *Artamia*, 187
 „ *Chætoblemma*, 445
 „ *Thamnophilus*, 193
leucogaster, *Cinnyricinclus*, 38
Leucometopon, 240
leucometopon, *Lanius*, 244
leuconotus, *Corvus*, 145
 „ *Lanius*, 271, 272
leucopygos, *Lanius*, 272
leucopygus, *Thamnophilus*, 349
leucorhynchus, *Laniarius*, 331
levaillantii, *Ceblepyris*, 221
liberianus, *Cosmophoneus*, 419
lobatus, *Lobotos*, 199
Lobotos, 199
longicauda, *Lamprotornis*, 53
longipennis, *Lanius*, 277
longirostris, *Telephonus*, 379
Lophopsarus, 131
lübberti, *Lanius*, 276
lucida, *Lamprotornis*, 78
ludwigi, *Dicrurus*, 178
luehderi, *Laniarius*, 301
lugubris, *Dicrurus*, 173
lugubris, *Pæopterus*, 117
lugubris, *Rhynchastatus*, 328
leucopsis, *Dryoscopus*, 342
luxuosa, *Juida*, 67

mackinnoni, *Fiscus*, 242
macrocerus, *Lanius*, 265
macropterus, *Corvus*, 152
madagascariensis, *Calicalicus*, 196
madagascariensis, *Ceblepyris*, 215
 „ *Corvus*, 145
 „ *Hartlaubius*, 36
 „ *Lanius*, 195
 „ *Loxia*, 190
 „ *Upupa*, 131
Maina, 130
Mainatus, 130
major, *Coracina*, 215
 „ *Laniarius*, 306
major, *Laniarius*, 308
Malaconotus, 406

malzacii, *Dryoscopus*, 346
mandana, *Tschagra*, 383
manningi, *Chorophoneus*, 424
maraisi, *Chlorophoneus*, 431
martensi, *Prionops*, 484
marwitzi, *Fiscus*, 257
massaicus, *Lamprocolius*, 73
 „ *Nilaus afer*, 454
mauriti, *Lanius antinorii*, 258
medius, *Lanius*, 276
Megalopterus, 51
melamprosopus, *Chlorophoneus*, 422
melanogaster, *Lamprotornis*, 82
melanoleucus, *Chaunonotus*, 359
 „ *Urolestes*, 232
melanoptera, *Prionops*, 485
melanothorax, *Chlorophoneus*, 426
melanozanthus, *Ceblepyris*, 205
melas, *Laniarius*, 334
melinoides, *Malaconotus*, 416
mellivorus, *Lanius*, 237
meloxita, *Oriolus*, 11
meneliki, *Oriolus*, 11
mentalis, *Sigmodus*, 467
mevesi, *Lamprotornis*, 59
miniatus, *Chlorophoneus*, 424
minor, *Corvus*, 152
minor, *Lanius*, 276
 „ *Nilaus*, 453
 „ *Tschagra*, 374
minutus, *Antichromus*, 387
modestus, *Chlorophoneus sulfureo-*
pectus, 427
modestus, *Dicrurus*, 176
modestus, *Dicrurus*, 177
molissimus, *Malaconotus*, 344
monarchus, *Oriolus*, 11
montana, *Lanius phœnicurus*, 295
monteiri, *Malaconotus*, 413
Moquinus, 442
morio, *Onychognathus*, 105
mossambicus, *Laniarius*, 308
mufumbiri, *Laniarius*, 321
multicolor, *Chlorophoneus*, 419
murinus, *Laniarius*, 336

- Musicus*, 166
musicus, *Dicrurus*, 173
 „ *Lanius*, 280
Myiopsar, 117
mystaceus, *Dicrurus*, 173

nabouroup, *Amydrus*, 103
Nabouroupus, 96
nandensis, *Dryoscopus*, 356
natalensis, *Tschagra*, 380
Necropsar, 132
neglectus, *Dryoscopus*, 311
Neolestes, 405
newtoni, *Fiscus*, 247
 „ *Oxynotus*, 229
Nicator, 436
niger, *Coracias*, 161
 „ *Lanicterus*, 202
nigerrimus, *Laniarius*, 331
nigra, *Campephaga*, 205
nigricans, *Sigmodus*, 470
nigrifrons, *Chlorophoneus*, 423
nigrifrons, *Lanius*, 276
nigripennis, *Oriolus*, 19
nigritemporalis, *Nilaus*, 461
nigrithorax, *Chlorophoneus*, 426
Nilaus, 450
niloticus, *Phoneus*, 287
niveoventer, *Picnonotus*, 218
Notauges, 85
notatus, *Oriolus*, 7
nubiæ, *Corvinella corvina*, 237
nubicus, *Fiscus*, 244
nyansæ, *Dryoscopus*, 346
nyassæ, *Amydrus*, 100

occidentalis, *Dryoscopus cubla*, 349
æneus, *Turdus*, 53
oleagineus, *Malaconotus*, 431
Oligomydrus, 96
olivaceus, *Chlorophoneus*, 435
olivaceus, *Malaconotus*, 407
omoensis, *Prionops*, 485
Onychognathus, 96

orbitalis, *Lanius*, 272
oreas, *Picathartes*, 160
orientalis, *Amydrus*, 105
 „ *Lamprocolius*, 77, 78
 „ *Laniarius*, 342
 „ *Pomatorhynchus*, 363
Oriolia, 192
Oriolidæ, 2
oriolinus, *Lobotos*, 200
Oriolus, 2
oriolus, *Coracias*, 3
 „ *Oriolus*, 3
ornatus, *Lamprotornis*, 64
ornatus, *Lanius*, 402
Otomela, 292
Oxynotus, 226

pallens, *Lanius*, 272
pallidirostris, *Lanius*, 270
pallidirostris, *Lanius*, 268
pallidus, *Lanius*, 270
 „ *Telephonus senegalus*, 363
paradoxus, *Lanius*, 287
pectoralis, *Coracina*, 218
pectoralis, *Enneoctonus*, 287
pelei, *Malaconotus*, 436
percivali, *Oriolus*, 13
percivali, *Tschagra*, 373
Perissornis, 122
permistus, *Oriolus monarchus*, 11
personatus, *Lanius*, 244
 „ *Oriolus*, 13
perspicillatus, *Laniarius*, 407
petiti, *Campephaga*, 204
phæcephalus, *Corvus*, 145
phænicea, *Campephaga*, 210
phænicea, *Campephaga*, 212
phænicopterus, *Lamprotornis*, 70
phænicopterus, *Turdus*, 210
phænicuroides, *Otomela*, 295
Pholia, 38
Pholidauges, 38
Phoneus, 287
piapiac, *Cryptorhina*, 161
pictus, *Telephonus*, 392

- Pilorhinus*, 96
pinetorum, *Lanius*, 276
plumata, *Prionops*, 482
poensis, *Laniarius*, 335
Pæopterus, 117
poicilorhynchus, *Cryptorhina*, 162
poliocephala, *Prionops*, 475
poliocephalus, *Malaconotus*, 407
poliocephalus, *Prionops*, 483
poliolopha, *Prionops*, 481
poliochlamys, *Malaconotus*, 415
polleni, *Xenopirostris*, 184
Pomatorhynchus, 361
pomeranus, *Lanius*, 290
porphyropleuron, *Lamprotornis*, 82
porphyropterus, *Lamprotornis*, 56
porphyurus, *Lamprocolius*, 77
potteri, *Bocagia*, 387
preussi, *Campephaga*, 202
preussi, *Chlorophoneus*, 421
 ,, *Coracina*, 224
preussi, *Onychognathus*, 100
prevosti, *Aërocharis*, 197
princeps, *Fiscus*, 265
pringlii, *Dryoscopus*, 353
Prionopidae, 444
Prionops, 474
pseudocollurio, *Lanius phoenicuroides*, 279
Pterocorax, 140
Ptiladela, 214
Ptilonorhynchus, 96
ptilonorhynchus, *Lamprotornis*, 78
Ptilostomus, 161
pulcher, *Spreo*, 93
pura, *Coracina*, 222
purpureiceps, *Lamprotornis*, 81
purpureus, *Lamprotornis*, 78
purpureus, *Lamprotornis*, 59
purpuropterus, *Lamprotornis*, 56
Pycathartes, 159
Pyrrhocheira, 96
Pyrrhocorax, 157
pyrrhocorax, *Pyrrhocorax*, 157
pyrrhostictus, *Lanius*, 249
quadricolor, *Telophorus*, 398
quiscalina, *Campephaga*, 202
raddei, *Lanius*, 279
reichenowi, *Amydrus*, 93
 ,, *Antichromus*, 389
 ,, *Chlorophoneus*, 422
 ,, *Enneoctonus*, 281
regius, *Cosmopsarus*, 49
religiosus, *Mainatus*, 130
remigialis, *Tschagra*, 369
retzii, *Sigmodus*, 470
Rhinocorax, 140
Rhodophoneus, 391
Rhynchastratus, 297
rolleti, *Oriolus*, 13
romanowi, *Otomeliphænicuroides*, 295
roseus, *Lanius*, 277
 ,, *Malaconotus*, 392
rothschildi, *Campephaga*, 213
rothschildi, *Laniarius funebris*, 328
rubiginosus, *Chlorophoneus*, 431
rudolfi, *Chlorophoneus*, 434
rueppelli, *Eurocephalus*, 447
rufa, *Lantzia*, 195
ruficaudus, *Lanius*, 293
ruficeps, *Lanius*, 289
 ,, *Lanius phænicurus*, 295
ruficeps, *Laniarius*, 299
rufinuchalis, *Laniarius*, 300
rufipennis, *Corvus*, 105
rufiventer, *Oxynotus*, 227
rufiventris, *Lamprotornis*, 93
 ,, *Laniarius*, 303
rufiventris, *Sigmodus*, 466
rufofuscus, *Telephonus senegalus*, 363
rufus, *Lanius*, 287
rupestris, *Pyrrhocorax*, 157
rüppelli, *Amydrus*, 105
rüppelli, *Onychognathus*, 105
ruticilla, *Hylophorba*, 196
rutilans, *Lanius*, 290
rutilus, *Lanius*, 290
sabini, *Chaunonotus*, 359

- salimæ*, *Dryoscopus*, 342
salvadorii, *Onychognathus*, 116
sancti-thomæ, *Onychognathus*, 97
scapularis *Corvus*, 144
scapulatus, *Corvus*, 144
schalowi, *Lanius*, 265
Schetba, 226
schistocerca, *Artamia*, 190
schoanus, *Malaconotus poliocephalus*, 412
scopifrons, *Sigmodus*, 468
segetum *Corvus*, 152
senator, *Phoneus*, 289
senegala, *Tschagra*, 362
senegalensis, *Corvus*, 161
senegalensis, *Dryoscopus*, 338
senegalensis, *Lanius*, 290
 „ *Tschagra*, 363
sharpei, *Cinnyricinclus*, 46
sharpei, *Dicrurus*, 181
shelleyi, *Amydrus*, 105
shelleyi, *Spreo*, 92
Sigmodus, 463
similis, *Chlorophoneus*, 427
similis, *Malaconotus*, 342
smithi, *Fiscus*, 252
somalicus, *Fiscus*, 258
somaliensis, *Laniarius*, 312
souzæ, *Corvinella*, 239
 „ *Tschagra*, 382
Spasornis, 193
speculigerus, *Lanius*, 293
Speculipastor, 47
spinitorquus, *Lanius*, 280
splendens, *Turdus*, 78
splendidus, *Lamprocolius*, 67
splendidus, *Lamprotornis*, 65
Spreo, 85
starki, *Malaconotus*, 409
sticturus, *Dryoscopus*, 304
 „ *Laniarius*, 311
Stilbopsar, 117
strümpelli, *Enneoctonus*, 285
stuhlmanni, *Pæoptera*, 119
Sturnidæ, 22
Sturninæ, 31
sturninus, *Oligomydus*, 113
Sturnus, 121
suahelicus, *Chlorophoneus sulfureo-pectus*, 427
 „ *Dryoscopus cubla*, 349
subcoronatus, *Fiscus*, 254
sublacteus, *Laniarius*, 317
sulfureopectus, *Chlorophoneus*, 426
sulphurea, *Coracina*, 217
superbus, *Spreo*, 89
superciliosus, *Malaconotus*, 427
swainsoni, *Lanicterus*, 205
sycobius, *Lamprocolius*, 73
talacoma, *Prionops*, 475
tandonus, *Moquinus*, 442
Telephonus, 361
Telophorus, 396
temmincki, *Lobatus*, 199
tenuirostris, *Lanius*, 280
tenuirostris, *Onychognathus*, 113
thamnophilus, *Dryoscopus*, 354
tibialis, *Cyanolanius*, 190
togoensis, *Corvinella affinis*, 237
torquatus, *Lanioturdus*, 442
 „ *Neolestes*, 405
tricolor, *Dryoscopus*, 339
tricolor, *Sigmodus*, 470
tristis, *Acridotheres*, 128
tristoides, *Maina*, 129
trivirgatus, *Telephonus*, 374
Tschagra, 361
tschagra, *Tschagra*, 379
turatii, *Laniarius*, 316
typicus, *Oxynotus*, 227
umbrinus, *Corvus*, 149
uncinatus, *Lanius*, 274
unicolor, *Cosmopsarus*, 50
upupa, *Pastor*, 131
Urolestes, 232
urcypgialis, *Lanius*, 250
Usanges, 51
ussheri, *Tschagra*, 374

Vanga, 192
 Vangidæ, 182
varia, *Otomela*, 295
varius, *Fregilupus*, 131
varius, *Lanius*, 280
verreauxi, *Cinnyricinclus*, 41
verreauxi, *Dryoscopus*, 339
vigil, *Lanius*, 276
vinaceigularis, *Prionops*, 487
viridis, *Artamia*, 187
viridis, *Lanius*, 189
viridis, *Telophorus*, 397
violaceus, *Lanius*, 189
vireo, *Nicator*, 441
viridipectus, *Lamprotornis*, 56

vulgaris, *Sturnus*, 121
vulturinus, *Corvus*, 134

waldeni, *Dicrurus*, 171
walleri, *Onychognathus*, 100
wernei, *Malaconotus*, 325
wickenburgi, *Crateropus*, 88

xanthornoides, *Campephaga*, 213
Xenopirostris, 184
xenopirostris, *Xenopirostris*, 185

zeylonus, *Telophorus*, 402
zosterops, *Laniarius*, 422

INDEX II.

English Names.

Bacbakiri, 402	Bush-Shrike, Lühder's, 302
Boubou, 304	„ Many-coloured, 420
„ Angola, 311	„ Monteiro's Grey-headed, 414
„ Erlanger's Black, 331	„ Olive, 435
„ Ethiopian, 313	„ Orange-breasted, 422, 428
„ Fernando Po, 335	„ Perrin's, 397
„ Gaboon, 316	„ Preuss's Grey-headed, 418
„ Jackson's Sooty, 334	„ Red-crowned, 299
„ Mozambique, 309	„ Red-naped, 300
„ Nyasaland, 336	„ Ruddy-breasted, 432
„ Slate-coloured, 328	„ Southern Grey-headed, 409
„ Sooty, 332	„ West African Grey-headed, 408
„ Turati's, 317	
„ Yellow-breasted, 319	
„ Zanzibar, 318	
Brubru, Black-browed, 461	
„ Cameroon, 460	
„ Lesser, 454	
„ Northern, 457	
„ Southern, 451	
„ White-flanked, 462	
Bush-Shrike, Anchieta's, 390	Choucador, 64
„ Black-breasted, 426	Chough, Alpine, 157
„ Black-fronted, 424	Corbivau, 134
„ Doherty's, 401	„ Thick-billed, 139
„ East African Grey-headed, 412	„ White-necked, 135
„ Four-coloured, 399	Corneille du Cap, 152
„ Gaboon fiery-breasted, 416	Crow, African Black and White, 145
„ Lagden's Grey-headed, 415	„ Brown-necked, 149
„ Lesson's fiery-breasted, 415	„ Edith's, 151
	„ Grey-necked Bare-headed, 160
	„ White-necked Bare-headed, 160
	Cuckoo-Shrike, Black, 206
	„ Blue, 225
	„ Comoro White-breasted, 217

- Cuckoo - Shrike, Flame - shouldered, 212
 „ Grey, 222
 „ Hartlaub's, 209
 „ Jackson's, 223
 „ Madagascar Grey, 216
 „ Newton's, 230
 „ Orange - shouldered, 213
 „ Pectoral, 218
 „ Petit's, 204
 „ Preuss's, 224
 „ Purple-throated, 203
 „ Red-shouldered, 210
 „ Sulphur-breasted, 217
 „ Wattled, 199
 Cubla, 349
 Cuisinier, 228
 Drongo, African Glossy-backed, 173
 „ Aldabra, 172
 „ Larger Velvet-mantled, 176
 „ Lesser Velvet-mantled, 177
 „ Ludwig's, 178
 „ Madagascar Crested, 168
 „ Walden's, 171
 „ Western Bush-, 181
 Echenilleur Gris, 221
 Fiscal, 248
 Geoffroy, 482
 Gonolek, 319
 „ Abyssinian, 325
 „ Burchell's, 323
 „ Mufumbiro, 322
 Grackle, Common, 130
 Grande Piegrièche, 237
 Helmet-Bird, Prevost's, 198
 Helmet-Shrike, Black-winged, 486
 „ Grey-crested, 481
 „ Long-crested, 482
 „ Martens's, 485
 „ Nile, 484
 Helmet-Shrike, Southern, 476
 Loriodor, 5
 Lorient coudougna, 13
 Magpie, Senegal, 162
 Magpie Shrike, 233
 Myna, Common, 129
 Nicator, White-throated, 437
 „ Yellow-throated, 441
 „ Zambesi, 439
 Nun Thrush, 11
 Oliva, 431
 Oriole, Black-winged Black-headed, 19
 „ Golden, 3
 „ Green-headed, 10
 „ Lichtenstein's Black-headed, 13
 „ Northern African Golden, 6
 „ Nun Black-headed, 11
 „ Short-billed Black-headed, 17
 „ Southern African Golden, 8
 „ Stout-billed Black-headed, 21
 Oxpecker, Red-billed, 28
 „ Yellow-billed, 23
 Piapiac, 161
 Piegrièche Blanco, 407
 „ Perrin, 397
 Pique-bœuf, 23
 Porte-Lambeaux, 123
 Puff-back Shrike, Zanzibar, 342
 Raven, Fan-tailed, 141
 Rook, Cape, 153
 Rosy-patched Shrike, Abyssinian, 392
 Shrike, Abyssinian Rosy-patched, 392
 „ Angola Puff-back, 355
 „ Aucher's Grey, 269

- Shrike, Bacbakiri, 402
 „ Bocage's Puff-back, 358
 „ Bohndorff's Red-billed, 467
 „ Boubou, 304
 „ Chestnut-fronted Red-billed, 468
 „ Coronated Fiscal, 255
 „ Cubla Puff-back, 350
 „ Eastern Woodchat, 288
 „ Emin's Red-backed, 286
 „ Gaboon Red-billed, 466
 „ Gambian Puff-back, 344
 „ Grey-backed Fiscal, 266
 „ Hartlaub's Woodchat, 291
 „ Heuglin's Puff-back, 347
 „ Hilgert's Rosy-patched, 394
 „ Lesser Grey, 277
 „ Long-tailed, 263
 „ Lübbert's Grey, 276
 „ Mackinnon's Grey, 242
 „ Magpie, 233
 „ Marwitz's Fiscal, 258
 „ Masai Rosy-patched, 396
 „ Nandi Puff-back, 356
 „ Newton's Fiscal, 247
 „ Nubian Fiscal, 245
 „ Pale Red-tailed, 293
 „ Pringle's Puff-back, 354
 „ Radde's, 279
 „ Red-backed, 281
 „ Retzius' Red-billed 471
 „ Rüppell's White-crowned, 448
 „ Severzow's Red-tailed, 295
 „ Smith's Fiscal, 253
 „ Socotran Grey, 275
 „ Somali Fiscal, 259
 „ Sousa's, 240
 „ Southern White-crowned, 445
 „ Stanley's Fiscal, 250
 „ Teita Fiscal, 261
 „ West African Boubou, 306
 „ Western Red-billed, 465
 „ White-rumped, 273
- Shrike, White-tailed, 443
 „ Wood-chat, 290
 „ Yellow-billed Long-tailed, 237
 „ Zanzibar Puff-back, 342
- Spreo, 85
 „ Beautiful, 94
 „ Cape Brown and White, 86
 „ Hildebrandt's, 92
 „ Shelley's, 92
 „ Superb, 89
 „ White-crowned, 88
- Starling, Abbott's, 45
 „ Ashy Glossy, 51
 „ Benguela Long-tailed, Glossy, 60
 „ Black and White, 47
 „ Black-breasted Glossy, 82
 „ Blyth's Chestnut-winged 110
 „ Burchell's Glossy, 62
 „ Caffer Chestnut-winged, 103
 „ Common, 121
 „ Common Blue-breasted Glossy, 74
 „ Common Chestnut-winged, 106
 „ Copper-tailed Glossy, 80
 „ Crested Yellow-billed, 131
 „ Eastern Splendid Glossy, 66
 „ Fischer's, 44
 „ Golden-breasted Glossy, 49
 „ Greater Long-tailed Glossy, 54
 „ Green Wedge-tailed Glossy, 69
 „ Hartlaub's Chestnut-winged, 98
 „ Kenrick's Narrow-tailed, 120
 „ Leguat's White, 132
 „ Los Island Glossy, 84
 „ Madagascar, 37
 „ Meve's Long-tailed Glossy, 60

- | | |
|---|---|
| Starling, Nordman's Glossy, 76 | Starling, White-billed Chestnut-winged, 115 |
| „ Northern Violet-backed, 39 | Tschagra, 380 |
| „ Pink-billed, 34 | „ Abyssinian, 372 |
| „ Prince's Island Glossy, 64 | „ Black-headed, 364 |
| „ Purple Glossy, 79 | „ James's, 384 |
| „ Purple-headed Glossy, 81 | „ Levillant's, 380 |
| „ Red-shouldered Glossy, 70 | „ Percival's, 373 |
| „ Rüppell's Long-tailed Glossy, 57 | „ Sandy, 370 |
| „ St. Thomas Island Chestnut-winged, 98 | „ Souza's, 382 |
| „ Salvadori's Chestnut-winged, 116 | Vanga, Bernier's, 192 |
| „ Sharpe's, 46 | „ Chabert, 189 |
| „ Slender-billed Chestnut-winged, 113 | „ Comoro Blue and White, 191 |
| „ Sokotra Chestnut-winged, 102 | „ Eastern White-headed, 188 |
| „ Southern Violet-backed, 42 | „ Grey-breasted, 194 |
| „ Stuhlmann's Narrow-tailed, 119 | „ Hook-billed, 193 |
| „ Waller's Chestnut-winged, 100 | „ Lafresnaye's, 185 |
| „ Wattled, 123 | „ Madagascar Blue and White, 190 |
| „ Western Narrow-tailed, 118 | „ Pollen's, 184 |
| „ Western Splendid Glossy, 68 | „ Red-tailed, 197 |
| | „ Rufous, 195 |
| | „ Van Dam's, 186 |
| | „ Western White-headed, 188 |
| | Vert-Doré, 53 |

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